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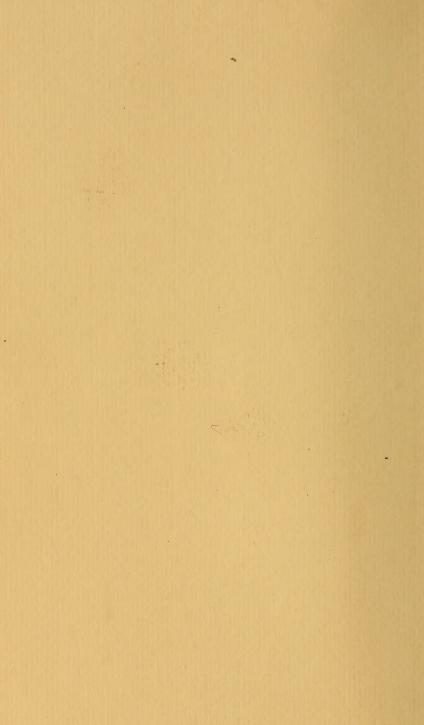




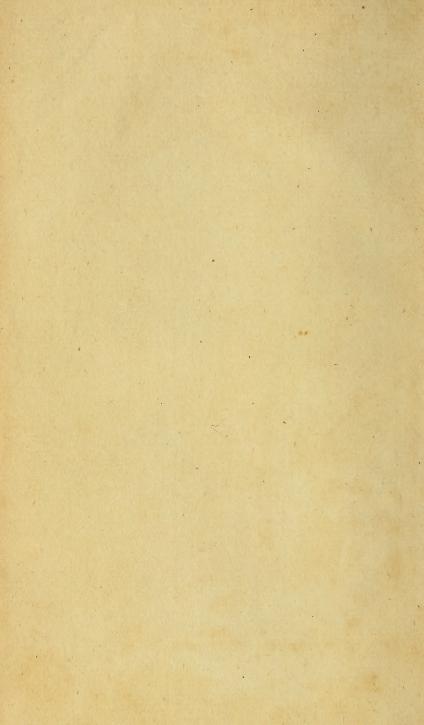
















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PHILOSOPHICAL

ARRANGEMENTS

BY

IAMES HARRIS ESQ.

LONDON

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ADVERTISEMENT.

MOST of the Speculations, contained in the following Work, are not the Author's own, but the Speculations of ancient and respectable Philosophers. His employ has been no more, than to exhibit what they taught, which he has endeavoured to do after the best manner he was able. The perusal of old Doctrines may afford perhaps amusement, if it be true (as he has observed in another place *), that, what from it's Antiquity is but little known, has from that very circumstance the recommendation of Novelty.

^{*} See the Preface to Hermes.

If he might ask a favour from his Readers, the favour should be this—that, they would not reject his Work upon a cursory inspection, should it appear in some parts too abstruse, and perhaps in others too obvious. He could not well avoid either the one or the other, without impairing an Arrangement, which had been established for Ages.

CONTENTS.

Chapter I. Introduction—Scope or End
of the Inquiry—begins from
the Arrangement of
fimple, or fingle Terms—
Character of these Terms—
Nature and Multitude of
the Objects, which they represent.
Page 1.

Chap. II. A Method of ARRANGEMENT

proposed—rejected, and why

—another Method proposed—

adopted, and why—General

Remarks—Plan of the Whole.

p. 24.

Chap. III. Concerning Substance natural—how continued, or carried on—Principles of this Continuation, two—increased to three—reduced again to two—these last two, Form and a Subject, or rather, Form and Matter. p. 38.

A 3 Chap.

Chap. IV. Concerning MATTER—an imperfect Description of it—
it's Nature, and the Necessity of it's existence, traced
out and proved—first by Abstraction—then by Analogy—
Illustrations from Mythology.
p. 63.

Chap. V. Concerning FORM—An imperfeet Description of it—Primary Forms, united with
Matter, make Body—Body
Mathematical—Body Physical—how they differ—Essential Forms—Transition to
Forms of a Character superior to the passive and elementary.
p. 84.

Chap. VI. Concerning FORM, considered

as an Efficient Animat
ING PRINCIPLE—Harmony

in Nature between the living

and the lifeless—Ovid, a philosophical Poet—Farther Defcription

Scription of the Animating Principle from it's Operations, Energies, und Effects -Virgil-The Active Principle and the Passive Principle run thro' the Universe -Mind, Region of Forms-Corporeal Connections, where necessary, where obstructive-Means and Ends-their different Precedence according to different Systems-Empedocles, Lucretius, Prior, Galen, Cicero, Aristotle, &c. Providence. p. 95.

Chap. VII. Concerning the Properties of Subflance, attributed to it in the Peripatetic Logic. p 132.

Chap. VIII. Concerning QUALITIES—corporeal—natural and incorporeal—natural and acquired—of Capacity, and Completion—Transitions immediate, and thro' a medium—Dispositions,

A 4 Habits

Habits—Genius—Primary and imperfect Capacity—Secondary and perfect—where it is, that no Capacities exist—Qualities, penetrating and superficial—Essential Form—Figure, an important Quality—Figures intellectual, natural, artificial, phantastic—Colour, Roughness, Smoothness, &c.—Persons of Quality—Properties of Quality—Some rejected, one admitted, and why. p. 142.

Chap. IX. Concerning Quantity—it's

two Species—their Charac
ters—Time and Place—their

Characters—Property of

Quantity, what—Quantities

relative—Figure and Number, their Effect upon Quantity—Importance of this Effect—Sciences Mathematical

appertain to it—their Use,

according

according to Plato—How other Beings partake of Quantity—Analogy, found in Mind—Common Sense and Genius, how distinguished—Amazing efficacy of this Genus in and thro' the World—Illustrations.

p. 180.

Chap. X. Concerning RELATIVES—their Source—Relatives apparent -real-their Properties, reciprocal-Inference, and Coexistence—Force of Relation in Ethics-in matters Dramatic-in Nature, and the Order of Being-Relations, amicable and hostile-Evil-Want-Friendship-Strife-Relation of all to the Supreme Cause-Extent and Use of this Predicament, or Arrangement. p. 212

Chap. XI. Concerning Action and PAS-SION—Action, it's five Spe-

cies

cies—those of Passion reciprocate-Mind Divine, Human-latter, how acted upon -Politics, Oeconomics, Ethics -Passivity in Bodies animate, and inanimate-Action, and Re-action, where they exist, where not-Selfmotion, what, and where-Power, whence, and what requisite both in Action and in Passion-Power, tho' like Non-Entity, yet widely different-Double in the reasoning Faculty—Power, not first in existence, but Energy, which never has ceased, or will cease, or can cease. p. 254.

Chap. XII. Concerning WHEN and WHERE

—Concerning Time and Place,
and their Definitions—When
and Where, how distinguished
from Time and Place, how
connected with them—Descriptions

fcriptions of When and Where—their Utility and Importance in human Life—various Terms, denoting these two Predicaments—others denoting them not, yet made to denote them—When and Where, their extensive influence—plausible Topics—concurring Causes—Opportunity, what—Chance, what it is not, what it is—Fate, Providence—cooperating Causes—Supreme Intelligence.

p. 290.

Chap. XIII. Concerning Position or Sitiuation—What it is, and how deduced—how it exists in Beings inanimate—in Vegetables—in Man—animal Progression—Works of Art—Attitudes—Illustrations of Attitude—from Poets—from Actors—from Orators—it's Efficacy, whence—Position, among

among the Elements of Democritus—it's Influence and Importance in the natural World—in the intellectual.

p. 315.

Chap. XIV. Concerning Habit, or rather

THE BEING Habited—

—It's Description—it's principal Species deduced and illustrated—it's Privation—

Conclusion of the second or middle Part of the Treatise.

P· 347·

Chap. XV. Concerning the Appendages
to the Univerfal Genera or
Arrangements; that is to fay
concerning Opposites, Prior, Subsequent, Together, or At once, and
Motion, usually called PostPredicaments—the Modes or
Species of all these (Motion
excepted) deduced and illustrated—Preparation for the
Theory

Theory of Motion. p. 360.

Chap. XVI. Concerning Motion Physi-CAL-It's various Species deduced and illustrated-blend themselves with each other, and why-Contrariety, Opposition, Rest-Motion Phyfical-an Object of all the Senses-Common Objects of Sensation, how many-Mo-TION, a thing not simple, but complicated with many other things—it's Definition or Description taken from the Peripatetics—the Accounts given of it by Pythagoras and Plato analogous to that of Aristotle, and why. p. 381.

Chap. XVII. Concerning Motion NotPHYSICAL—This means METAPHYSICAL, and why fo
called—Spontaneity—Want
—Perception, Confciousness,
Anticipation, Preconception
Appetite

—Appetite, Resentment, Reafon — Motion Physical and Metaphysical, how united— Discord and Harmony of the internal Principles—Powers vegetative, animal, rational —Immortality—Rest, it's several Species—Motion, to what perceptive Beings it appertains; to what not—and whence the Difference. p.

Chap. XVIII. Conclusion—Utilities deducible from the Theory of these Arrangements—Recapitulation. p. 452.

PHILOSOPHICAL

ARRANGEMENTS

ADDREST TO THE RIGHT HONOURABLE THOMAS HYDE CHANCELLOR OF THE DUTCHY OF LANCASTER &c. &c.

CHAPTER I.

Introduction—Scope, or end of the Inquiry -Begins from the ARRANGEMENT of simple, or single Terms-Character of these Terms-Nature and Multitude of the Objects, which they represent.

HILOSOPHY, taking its name Ch. I. from the Love of Wisdom, and having for its End the Investigation of Truth, has an equal regard both to Practice and Speculation, in as much as Truth of every kind is similar and conge-B nial.

Ch. I. nial. Hence we find that some of the most illustrious Actors upon the great Theatre of the World have been engaged at times in Philosophical Speculation. Pericles, who governed Athens, was the Disciple of Anaxagoras; Epaminondas fpent his youth in the Pythagorean School; Alexander the Great had Aristotle for his Preceptor; and Scipio made Polybius his Companion and Friend. Why need I mention Cicero, or Cato, or Brutus? The Orations, the Epistles, and the Philosophical Works of the first, shew him fufficiently conversant both in Action and Contemplation. So eager was Cato for Knowledge, even when furrounded with Bufiness, that he used to read Philosophy in the Senate house, while the Senate was affembling: and as for the Patriot Brutus, though his life was a continual Scene of the most important Action, he found time not only to study, but to compose a Treatise upon Virtue.

Ch. I.

WHEN these were gone, and the worst of times succeeded, Thrasea Pætus, and Helvidius Priscus were at the same period both Senators, and Philosophers; and appear to have supported the severest trials of Tyrannic Oppression by the manly system of the Stoic Moral *. The best Emperor, whom the Romans, or perhaps any Nation, ever knew, Marcus Antoninus, was involved during his whole life in business of the last consequence; fometimes Conspiracies forming, which he was obliged to diffipate; formidable Wars arising at other times, when he was obliged to take the field. Yet during none of these periods did he forsake Philosophy, but still persisted in Meditation +, and in committing his thoughts to

^{*} See Arr. Epictet. lib. i. c. 1. and 2. and the Notes of my late worthy Friend, the learned Editor, Upton. See also Mrs. Carter's excellent Translation.

[†] See the Original, particularly in Gataker's Edition. See also the learned and accurate Translation of Meric Casaubon.

Ch. I. writing, during moments gained by flealth from the hurry of courts and campaigns.

IF we descend to later ages, and search our own Country, we shall find Sir Thomas More, Sir Philip Sidney, Sir Walter Raleigh, Lord Herbert of Cherbury, Milton, Algernon Sidney, Sir William Temple, and many others, to have been all of them eminent in public Life, and yet at the same time conspicuous for their Speculations and Literature. If we look abroad, examples of like character will occur in other Countries. Grotius, the Poet, the Critic, the Philosopher, and the Divine, was employed by the court of Sweden as Ambassador to France: and De Witt, that acute but unfortunate Statesman, that Pattern of parcimony and political accomplishments, was an able mathematician, wrote upon the Elements of Curves, and applied his Algebra with accuracy to the Trade and Commerce of his Country.

ARRANGEMENTS.

And so much in Defence of Philo- Ch. I. sophy against those, who may possibly undervalue her, because they have succeeded without her; those I mean (and it must be confest they are many) who, having spent their whole lives in what Milton calls the bufy hum of Men, have acquired to themselves Habits of amazing efficacy, unassisted by the helps of Science and Erudition. To fuch the retired Student may appear an aukward Being, because they want a just standard to meafure his merit. But let them recur to the bright examples before alledged; let them remember that these were eminent in their own way; were men of action and business; men of the world; and yet did they not disdain to cultivate Philosophy, nay, were many of them perhaps indebted to her for the splendor of their active Character.

This reasoning has a farther end. It justifies me in the address of these Phila-B 3 sophical

Ch. I. Sophical Arrangements, as your Lordship has been distinguished in either character, I mean in your public one, as well as in your private. Those, who know the History of our foreign transactions, know the reputation that you acquired both in Poland and in Germany*: and those, who are honoured with your nearer friendship, know that you can speculate as well as ast, and can employ your pen both with Elegance and Instruction.

It may not perhaps be unentertaining to your Lordship to see, in what manner the Preceptor of Alexander the Great arranged his Pupil's Ideas, so that they might not cause confusion for want of accurate disposition. It may be thought also a fact worthy of your notice, that he be-

^{*} The Treaty of Warfaw, negotiated and figned by Lord Hyde, was made in January, 1745; that of Drefden, made under Lord Hyde's Mediation, was figned the December following. By this last Treaty, not only the Peace of Germany was restored, but the Austrian Netherlands, and the King of Sardinia's Territories were in consequence of it preserved.

came acquainted with this method from Ch. I. the venerable Pythagoras, who, unless he drew it from remoter fources, to us unknown, was, perhaps, himself its inventor and original teacher (a).

POETS relate that VENUS was wedded to Vulcan, the Goddess of Beauty to the God of Deformity. The Tale, as fome explain it, gives a double representation of Art; Vulcan shewing us the Progressions of Art, and Venus the Completions. The Progressions, such as the hew-

Fabricius, in his Bibliotheca Græca, T.i. p. 394, mentions a Tract upon this Subject, published at Venice an. 1571, under the name of Archytas, but he informs us withal, that its Authenticity is doubted, because the above-mentioned Quotations from Archytas, made by Simplicius, are not to be found there. This Tract I

have never feen.

⁽a) From Pythagoras it past to his Disciples, and among others to Archytas, who wrote upon the Subject in the Doric Dialect, the Dialect generally used by Pythagoras, and his Followers. This Treatife of Archytas, is in part still extant, the' but little known, large Quotations out of it being inferted by Simplicius into that valuable, but rare Book, his Commentaries on the Predicaments, from which many of them are transferred into the Notes upon the different Chapters of this Work.

Ch. I. ing of Stone, the grinding of Colours, the fusion of Metals, these all of them are laborious, and many times disgustful: the Completions, such as the Temple, the Palace, the Picture, the Statue, these all of them are Beauties, and justly call for admiration.

Now if Logic be one of those Arts, which help to improve Human Reason, it must necessarily be an Art of the progressive Character; an Art which, not ending with itself, has a view to something farther. If then in the following Speculations it should appear dry rather than elegant, severe rather than pleasing, let it plead by way of defence that, tho' its importance may be great, it partakes from its very nature (which cannot be changed) more of the desormed God, than of the beautiful Goddess.

THE subject commences in the manner following. THE VULGAR can give reasons to a certain degree (d), and can examine after a manner, the reasons given them by others.—And what is this, but NATURAL LOGIC? If therefore these Efforts of theirs have an Effect, and nothing happen without a Cause, this Effect must of necessity be derived from certain Principles.

THE Question then is, What these Principles are; for if these can be once investigated, and then knowingly applied, we shall be enabled to do by Rule, what others do by Hazard; and in what we do, as much to excell the uninstruct-

⁽d) Πάντες γὰς μέχρι τινὸς κὰ ἐξετάζειν κὰ ὑπέχειν λόγον, κὰ ἀπολογεῖσθαι κὰ κατηγορεῖν ἐγχειρᾶσιν. Τῶν μὲν ἔν ωολλῶν οἱ μὲν εἰκῆ κ. τ. λ. Omnes enim quadam tenus et exquirere et sustinere rationem, et defendere, et accusare aggrediuntur. At ex imperitâ quidem multitudine alii temerè, &c. Arist. Rhetor. lib. i. cap. 1. See also Vol. the first of these Works, Treatise the third, in the Notes, p. 286.

Ch. I. ed Reasoner, as a disciplined Boxer surpasses an untaught Rustic.

Now in the investigation of these Principles we are first taught to observe, that every Science (as Arithmetic, Geometry, Music, Astronomy) may be resolved into it's Theorems; every Theorem into it's Syllogisms; every Syllogism into it's Propositions; and every Proposition into certain simple, or single Terms.

Ir this be admitted, it is not difficult to fee, that, in order to know Science, a man must know first what makes a Theorem; in order to know Theorems, he must know first what makes a Syllogism; in order to know Syllogisms, he must know first what makes Propositions; and to acquire a general Knowledge of these, he must first know simple or single Terms, since it is out of these that Propositions are all of them compounded.

And thus we may perceive, that where these several Resolutions end, 'tis hence precisely the disquisition is to begin (e).

Ch. I.

ĺŧ

(e) There is an elegant Simile, taken from Architecture, to illustrate this Speculation. The Quotation from the original Author (Ammonius) may be found in the first Volume of these Treatises, p. 271. to which a Translation is there subjoined.

Ammonius, after he has produced his Similitude, applies it as follows.

Ούτως έν κλ ο Φιλόσοφων ωσιεί βελόμενων γαρ woιñσαι ἀπόδειξιν, Φησὶ φρος ξαυτον, βέλομαι wegi 'Αποδείζεως είπεῖν. 'Αλλ' ἐπειδή ή ἀπόδειζις συλλογισμός έςιν έπις ημονικός, αδύναδου είπεῖν σερί τέτε τον μπ πρότερον είπουτα, τί έςι συλλογισμός° του δε άπλως συλλογισμού έκ αν μαθοίμεν, έ μαθόντες, τί έςι σρότασις λόγοι μεν γαρ τινές εισιν αί ωροτάσεις των δε τοιέτων λόγων συλλογή ές το ο συλλογισμός δς ε άνευ τε γνώναι τὰς προτάσεις, ἀδύνατου μαθεῖν του συλλογισμόν ἐκ γὰρ τέτων σύγκειται ἀλλ' ἐδὲ τὴν Φρότασιν, άνευ των ονομάτων κζ των ρημάτων, έξ ων συνές ηκε σας λόζω. τὰ δὲ ὀνόματα, κὶ ρήμαλα ἄνευ τῶν ἀπλῶν Φωνων έκας ον γαρ τέτων Φωνή ές ε σημαντική. Δεί 🕏 υ ωρότερου ωερὶ τῶυ ἀπλῶν Φωνῶν εἰπεῖν. Ἐνταῦθα หู้งุที่ 🗜 อิยบอูโล หลาย์ ภทธิย 🦂 🥱 🥱 วิโทบยิลเ าราง รทีร พอล์ รัยบร apxin.

Ch. I. It must begin, where they end, that is to say, from simple Terms; because, if

it

άρχή. Πρότερον γάρ διαλέγεται ωερί των άπλων Φωνων έν ταῖς Κατηδορίαις. Εἰθ' έτω ωερὶ ὀνομάτων, κὸ ρημάτων, κό προτάσεως, έν τῷ περί Ερμηνείας εἶτα weel τε άπλως συλλοισμέ, εν τοις wpoτέροις 'Αναλυτικοίς είθ έτω περι αποδείζεως, έν τοίς ύσέροις 'Αναλυτικοῖς. Ἐυταῦθα ἔν τὸ τέλΦο τῆς ωράξεως, ὅπερ ἦν αρχη της Seweias --- And thus also the Philosopher does: being willing to form a Demonstration, he says to himself, I am willing to speak concerning Demonstration. But, in as much as Demonstration is a Scientific Syllogism, it is impossible to say any thing concerning it, without first saying what is a Syllogism; nor can we learn what is simply a Eyllogism, without having first learnt what is a Proposition; for Propositions are certain Sentences; and it is a Collection of such Sentences that forms a Syllogism: so that without knowing Propositions, it is impossible to learn what is a Syllogifm, because it is out of these that a Syllogism is compounded. Farther than this, it is impossible to know a Proposition, without knowing Nouns and Verbs, out of which is composed every Species of Sentence; or to know Nouns and Verbs without knowing Sounds articulate, or simple Words, in as much as each of these is a Sound articulate, having a Meaning. It is necessary therefore in the first place to say something concerning simple Words.

Here then ends the Theory, and it is this, which becomes the Beginning of the Practice, (that is, from this last part the Theory is to be carried into execution.)

it were to begin fooner, it would begin Ch. I. in the middle; and because if the Resolutions did not stop somewhere, there could be no beginning at all.

Now as to the Subject, whence the Disquisition is to begin (I mean the Contemplation of Simple Terms)'tis obvious it must be widely different from the several Subjects that precede it. The preceding Subjects, fuch as Theorems, Syllogisms, Propositions, may all of them

First therefore (with a view to the practical Part) he differts concerning simple articulate Sounds in his PREDICA-MENTS: after that, concerning Nouns and Verbs, and Propostions, in his Treatise concerning INTERPRETATION: then, concerning Syllogifm, simply so called, in his FIRST ANALY-TICS: and finally, concerning Demonstration, in his LAT-TER ANALYTICS. And here is the End of the Practice, which End (as we have shewn above) was the Beginning of the Theory. Ammon. in Prædic. p. 16. ed. 8vo.

We have made this large Extract from Ammonius, not only as it fully explains the Subject of this Treatise, but as it gives a concise, and yet an elegant View of that celebrated Work of Ariffotle, his ORGANON, and of that just and accurate Order in which its feveral Parts stand arranged.

Ch. I. be refolved, because they are all of them compound: But Terms cannot be resolved, because they are simple or single. The most we can do, as their Multitude is large, is to seek after some Method, by which they may be classed or arranged; and if different Methods of Arrangement occur, then to adopt out of the serveral that, which appears to be the best.

It being therefore adjusted, from what Subject we are to begin (namely, from simple or single Terms) and after what Manner we are to begin (namely, by classing or arranging them) a farther Question occurs before we proceed, and that is, What is it, that these Terms represent?

THERE feem but three Classes possible, and these three are either Words—or IDEAS—or THINGS, that is to say, Individuals.

Now they cannot represent merely Ch. I. Words, for then the Treatise would be Grammatical—nor yet merely Ideas, for then the Treatise would be Metaphysical—nor yet merely Things or Individuals, for then the Treatise would be Physical.

How then shall we decide?—Shall we deny that *simple Terms* represent any one of these? Or shall we rather assume the contrary, and say they represent them all?—If so, and this be, as it will appear, the more plausible Hypothesis, we may affirm of simple Terms (the Subject of this Inquiry) that they are Words representing Things, through the Medium of our Ideas (f).

THAT

⁽f) Ammonius, in his excellent Commentary upon these Predicaments of Aristotle, informs us there were different Sentiments of different Philosophers as to the Subject, concerning which these Predicaments were conversant. Some, as Alexander of Aphrodiseum, confined them wholly to Words: others, as Eustathius,

Ch. I.

THAT this in fact is their Character, may appear from the many Logical, Metaphysical, and Physical Theorems, and to these (as Man is a Part of Nature) we may add also Ethical Speculations, which are occasionally interspersed in the course of this Inquiry (g).

Bur

thius, wholly to Things: a third fet, of which was Porphyry, wholly to our Thoughts or Ideas. Ammonius appears to have supposed that they all erred, and that, not so much in the respective Subjects they adopted as in the restriction or limitation to one Subject only. For this reason he immediately subjoins—

Οἱ δὲ ἀκοιθές ερον λέγον ες, ὧν εῖς ἐςι κὰ Ἰαμθλιχ⑤, Φασὶν ὡς ἔτε ωερὶ νοημάτων μόνων ἐςιν αὐτῷ ὁ λόγω, ἔτε ωερὶ ψονων μόνων ἐςιν αὐτῷ ὁ λόγω, ἔτε ωερὶ Φωνῶν μόνων, ἄλλ ἔςιν ὁ σκοπὸς τῶν κατη ιοριῶν ωερὶ Φωνῶν σημαινεσῶν ωράγμαλα, διὰ μέσων νοημάτων—— But those, who speak more accurately, of which number Iamblichus is one, say that Aristotle discourses not upon Ideas alone, nor upon Words alone, nor upon Things alone; but that the Scope or End of his Categorics, is, concerning Words, signifying Things, thro' the Medium of our Thoughts or Ideas. Ammon. in Prædicam. p. 14. 6. ed. 8vo.

(g) Thus Boethius——Hac quoque nobis de decem Prædicamentis inspectio, et in Physica Aristotelis Doctrina, BUT to return to our subject, the Ch. I. Contemplation of Simple Terms.

As they appear to be Words, and not only Words, but Words which reprefent Things through the medium of our Ideas, it may not be improper to obferve something upon the several Objects

et in Moralis Philosophiæ Cognitione perutilis est; quod per singula currentibus magis liquebit. Boeth. in Cat. p. 113. Edit. fol. Basil.

Ammonius speaks to the same purpose in fuller and more general terms— "Οτι δὶ χρήσιμόν ἐςι τὸ βιβλίον εἴς τε τὸ Ξεωρηλικὸν ΦιλοσοΦίας μέρω, κὰ τὸ Εφρατικὸν, ἐκ τῶν προειρημένων δηλον, εἴπερ κὰ τὴν ἀπόδειξιν, ἢν ἐδείξαμεν, ἄνευ τῶν ἀπλῶν Φωνῶν ἐκ ἔςι γνῶναι, κὰ ὅτι περὶ τῶν κοινοτήτων διαλαμβάνει, εἰς ὰ τὰ ὅντα πάντα διαιρεῖται—that the Book is useful both to the speculative Part of Philosophy, and the Practical, is evident from what has been said, if it be true both that Demonstration, as we have sheun, cannot be known without simple Words, and that The Book also TREATS CONCERNING THOSE COMMON CHARACTERS OR ATTRIBUTES, INTO WHICH ALL BEINGS ARE DIVIDED. Ammon. in Præd. p. 16. Edit. Venet. 8vo.

Ch. I. thus represented, and that with respect both to their Nature, and to their Multitude.

As to their Nature (without being too philosophically minute), 'tis enough to observe, that some of them are sensible. Objects, and some of them are intelligible—that the sensible are perceived by our several Senses, and make up the Tribe of external Individuals—that the intelligible are more immediately our own, and arise within us, when the Mind, by marking what is common to many Individuals, forms to itself a Species; or, when by marking what is common to many Species, it forms to itself a Genus.

Nor are these mental Productions the mere efforts of Art, the ingenious inventions of Human Sagacity, but, under the original guidance of pure Nature, even Children in their early days spontaneously fashion them, and spontaneously neously

weously refer them to Individuals, as they Ch. I. occur, faying of this Individual, 'tis a Horse; of another, 'tis a Dog; of a third, 'tis a Sparrow (h).

IF from the Nature of these Objects (which we have now supposed to be either sensible or intelligible) we pass to their Multitude, we shall find the Genera to be sewer than the Species, and that from this plain reason, because many Species are included within one Genus. We shall find also the Species to be sewer than the Individuals, and that by parity of reason, because many Individuals are included within one Species. But as for Individuals themselves,

⁽h) See Hermes, B. III. c. iv. where the Doctrine of general or univerfal Ideas is discust more largely.

See also the Escapupn, or Introduction of Porphyry, where the Subject of Genus and Species is treated in a perspicuous and easy method. This Tract is usually prefix to Aristotle's Logic.

Ch. I. these we shall find to be truly infinite; and not only infinite, but changing every moment, as the old are incessantly perishing, the new incessantly arising.

YET 'tis these that compose that Universe, in which we exist; and without knowing something of these, we may be considered as living, like the Cimmerians, in Homer,

'Hέρι κ νεφέλη κεκαλυμμένοι—— *
Cover'd with mist and cloud.

IF, therefore, all Science be something definite and steady (for without this character it would not merit the name), how can it possibly bear relation to such a Multitude as this, a multitude in character so truly contrary to it's own, a multitude every where sleeting, every where infinite and vague? How indeed

^{*} Odvoo. A. 15.

should the fleeting be known fleadily; Ch. I. or how should the vague and infinite (i) be known definitely?

(i) Infinitorum nulla cognitio est; infinita namque animo comprehendi nequeunt; quod autem ratione mentis circumdari non potest, nullius Scientiæ sine concluditur: quare infinitorum Scientia nulla est. Boeth. in Præd. p. 113. Edit. Bas.

Such was the doctrine of *Boethius*, who, according to the practice of the age, in which he lived, united the *Platonic* and the *Peripatetic* Philosophies. But *Aristotle* himself taught the same doctrine many centuries before.

Εί δη το μεν ἄπειρου, η ἄπειρου, ἄγνωσου, το μεν κατά το ωλήθων η μέγεθων ἄπειρου, άγνωσον ωοσόν τι το θε κατ' είδω άπειρου, άγνωςον τοιόν τι των δ' άρχων ἀπείρων ἐσων κὰ κατὰ ωλῆθων κὰ κατ' εἶδων, αθύνατον είθεναι τα έκ τέτων. έτω γαρ είθεναι το σύνθετου υπολαμβάνομεν, όταν είδωμεν έκ τίνων κ) σόσων isiv. Arist. Phys. 1. i. p. . Edit. Sylb. If therefore INFINITE, considered as infinite, be UNKNOWABLE, then that which is infinite in Multitude or Magnitude is unknowable as to QUANTITY, and that which is infinite in Form is unknowable as to QUALITY. But the Principles being infinite both in Multitude and in Quality, 'tis impossible to know the Beings derived out of them. For then'tis we conceive that WE KNOW ANY BEING COMPOSITE, when we know out of WHAT Things, and HOW MANY Things it is compounded.

Ch. I. As this can hardly be supposed, 'tis for this reason that Logic, which is justly called THE ORGAN (k), or Instrument of the Sciences, has for it's first Employment to reduce Infinitude; and this it does by establishing certain definitive Arrangements, or Classes, to

Thus Ammonius on the Categorics, p. 8. where we may find also the reasonings both of the Stoics and the Peripatetics.

⁽k) The Stoics held Logic to be a Part of Philosophy; the Peripatetics held it no more than an Or-GAN, or INSTRUMENT; Plato held it to be both, as well a Part as an Organ. His Reasoning, according to Ammonius was, as follows. Καθάπες γάς Φησιν ο ξέςτης δίλτος, ο μεν μετρών, ο δε μετρέμευ , κ ο μέν μετρων δργανόν έςι της μετρήσεως, ό δε μετρέμευ Φο μέρ Φο τε όλε ύγρε ωσαύτως κλή Λοδική ανευ μέν των ωραγμάτων έσα, δεγανόν ές: της Φιλοσοφίας, συμβιβαζομένη δε τοῖς ωράγμασι, μέρ εςι της Φιλοσοφίας. As the Quart, fays he, is twofold, one that which measures, the other that which is measured; and as that, which measures, is the Organ of Mensuration; that, which is measured, the Part of some whole or intire fluid: in like Manner also Logic, when taken apart from things, is an Organ of Philosophy; when connected with them, is a Part of Philosophy.

fome of which all Particulars may be referred, however numerous, however diversified, the past, the present, the future, all alike.

Ch. I.

And thus we return to Classing and Arranging, the Process already suggested to be the proper one.

IT remains to inquire, whether there are more Methods of Arrangement than one; and, if more, then, from among them, which method we ought to prefer.

But this will be the Subject of the following Chapter.

CHAP. II.

A Method of Arrangement proposed—rejected, and why—another Method proposed—adopted, and why—General Remarks—Plan of the Whole.

Ch. II. ONE Method of Arrangement is as follows.

THE Multitude of Ideas treasured up in the human Mind, and which, bearing reference to Things, are expressed by Words, may be arranged and circumferibed under the following characters. They all denote either Substance or Attribute—and Substance and Attribute may be each of them modified under the different characters of Universal and Particular, as best besits the Purposes of Reasoning and Science. Thus Man is an universal Substance; Alexander,

ander, a particular One: Valour, an uni- Ch. II. versal Attribute; the Valour of Alexander, a particular One.

AND hence there arises a QUADRUPLE ARRANGEMENT OF TERMS; an Arrangement of them into SUBSTANCE UNIVERSAL, and SUBSTANCE PARTICULAR; into ATTRIBUTE UNIVERSAL, and ATTRIBUTE PARTICULAR, to some one of which Four not only our Words and our Ideas, but the innumerable Tribe of Individuals may all of them be reduced (a).

A LARGE

⁽a) This method may be found in the beginning of Aristotle's Predicaments, before he comes to the actual enumeration of the Predicaments themselves.

See Aristot. Prædic. p. 23. Edit. Sylb. Των ονίων τὰ μεν καθ' υποκειμένε κ. τ. λ.

The Stagirite, in giving this quadruple Arrangement, explains himself not by Names, but by Descriptions. Substance universal he describes, as follows—μαθ΄ υποκειμένε τινος λέγεται, ἐν ὑποκειμένω δ΄ ἐδενί ἐςι— Attribute particular, ἐν ὑποκειμένω μέν ἐςι, καθ΄ ὑπο-

Ch. II. A LARGE Reduction this, yet a Reduction which may possibly lead us into another Extreme, by rendering that Multitude, which we would confine, too limited, too abridged. Suppose, therefore, we were to inquire whether this Reduction might not be enlarged, and a second and more perfect Method than the last be established.

THE World, as we see, is filled with various Substances. Each of these possesses it's proper Attributes, and is at the same time encompassed with certain

κειμένε δε έδενος λέγεται—Attribute general, καθ' ύποκειμένε τε λέγεται, η εν ύποκειμένω εςίν—Subflances particular, έτε εν ύποκειμένω εςίν, έτε καθ' ύποκειμένε τινος λέγεται.

Those, who would see an explanation of those several Descriptions, and why Aristotle prefers them to their peculiar Names, may consult his Greek Commentator, Ammonius, and his Latin one, Boetbius, who are both of them copious and accurate upon the subject.

Circumstantials. Not to speak of intelli- Ch. II. gible Substances (which belong rather to Metaphysics), natural Substances appear all to be extended; nor that fimply, but under a certain external Figure, and internal Organization. A Lion and an Oak agree, as they are both extended; yet have they each a Figure, and Organization peculiar. A living Lion and a brazen Lion may have the same external Figure, but within there is a wide Difference from the possession of Organization on one fide, and the want of it on the other. If then we call the Attribute of Extension QUANTITY, that of Figure and Organization QUALITY, we may fet down these two (I mean Quantity and Quality) as the two great essential Attributes belonging to every Substance, whether natural or artificial.

AGAIN, every Substance, whether natural or artificial, either from Will or from Appetite, or, where these are want-

Ch. II. ing, from such lower Causes as it's Figure or mere Quantity, has (in an enlarged use of the Words) a Power to act. Thus 'tis through Will, that Men study; through Appetite, that Brutes eat; through it's Figure, that the Clock goes; and through its Quantity, that the Stone descends. Nor are they only thus capable of acting, but also of being acted upon, and that too each of them, according to its respective Character. The Mind is acted upon by Truth, the Appetite by Pleasure, the Clock by a Spring, and the Stone by Gravitation. Thus then, besides Quantity and Quality, we have found two other Attributes, common to all Substances, and these are Ac-TION and PASSION.

> AGAIN, it often happens when Subflances are not present to us, that we are desirous to know, when and where they existed. When, we ask, lived Homer? Where, we ask, stood the antient Memphis?

we learn the Time and Place, which circumscribed the existence of these Beings.

Now as all sensible Substances are circumscribed after these manners, hence we may consider the When, and the Where, as two Circumstantials, that inseparably attend them. And thus have we added two more Attributes to the number already established.

things exist, we are often led to consider their Position, and that more especially in living Substances possessing the Power of Self-Motion. There is a manifest difference between reclining and sitting; between sitting and standing; and there are other Circumstances of Position, which extend to all Substances whatever. And thus must Position or Situation be subspined as another different Attribute.

Ch. II. ADD to this, when Substances are superinduced upon Substances, we consider them under the character of Cloathing or HABIT. Thus in the strict sense of the word, the Glove, covering our hand, the Shoe our foot, the Coat our Body, are so many Species of Habit. By a more distant Analogy the Corn may be said to cloath the sields, the Woods to cloath the Mountains; and by an Analogy still more remote than that, the Sciences and Virtues to be Habits, that cloath the Mind.

Last of all, in the variety of co-existing Substances and Attributes, there are
many whose very Existence infers the Existence of some other. Thus in Substances,
the Existence of Son infers that of Father; of Servant, that of Master: in
Quantity, the Existence of greater infers that of less; in Position, above infers
below; and in the time When, subsequent

has a necessary respect to prior. 'Tis Ch. II. when we view things in these mutual Dependencies, in these reciprocal Inferences, that we discover another Attribute, the Attribute of RELATION.

AND thus instead of confining ourselves to the simple Division of Substance and Attribute, we have divided Attribute itself into nine distinct forts; some of which we have
considered as essential, others as circumstantial, and thus made upon the whole
(by setting Substance at their Head) ten
comprehensive and universal Genera, called, with reference to their Greek
name, Categorics; with reference to
their Latin name, Predicaments; and
styled in the Title of this Work, Philosophical Arrangements (b). When

enume-

⁽b) The Antients gave to these ARRANGEMENTS different Names, and made also the Number of them different. Some, as Archytas, called them καθόλε λόδοι,

Ch. II. enumerated (c), their feveral Names are in order, as they follow: Substance,

QUA-

λόδοι, universal Denominations; others, as Quintilian, Elementa, Elements; others, as Aristotle, 2/14070 -narnyopias, Figures, or Forms of Predication; xarnγορίαι, Prædicaments; γένη γενικώτατα, the most general or comprehensive Genera, τὰ ωρῶτα γένη, the primary Genera. They differed also as to their Number. Some made them two, Subject and Accident, or (which is the fame) Substance and Attribute; others made them three, dividing Accidents into the inherent and circumstantial; the Stoics held them to be four, unoκείμενα, ωοία, ωως έχουτα, κ ωρός τι ωως έχουτα, Subjects, things distinguished by Qualities, distinguished by being peculiarly circumstanced within themselves, distinguished by being so with reference to something else; Plato faid they were five, εσία, ταυτότης, έτερότης, κίνησις 2) saois, Substance, Identity, Diversity, Motion, Rest; others made feven; lastly, the Pythagoreans and Peripatetics, maintained the Number usually adopted, that is to fay, those ten, which make the Subject of this Treatife.

See Aristot. Prædic. p. 24, et Metaphys. p. 79, 100, 104, &c. Edit. Sylburg. Quintil. l iii. c. 6. Ammonin Prædicam. p. 16, 17, &c. Edit. Venet. 8vo. 1545. Simplic. in Prædicam. p. 16. V. Edit. Basil. Fol. 1551.

As Words, by fignifying Things, through the Medium of our Ideas, are effential to Logic, and are the

QUALITY, QUANTITY, RELATION, Ac-Ch. II. TION, PASSION, WHEN, WHERE, POSI-TION, and HABIT.

As each of these ten Predicaments has it's subordinate distinctions, the Basis of our Knowlege will be now so amply widened, that we shall find Space sufficient, on which to build, be our Plan diversished, and extensive, as it may.

WE cannot conclude this Chapter without observing, that the doctrine of these Categories, these Predica-Ments, these Primary Genera, or

Materials of every Proposition, the present Work may be called Logical. But as the Speculations extend to Physics, to Ethics, and even to the First Philosophy, they become for that reason something more than Logical, and have been called, with a view to this their comprehensive Character, not Logical, but Philosophical Arrangements.

⁽c) Των κατα μηδεμίαν συμπλοιήν λεδομένων, έκασον ήτοι ἐσίαν σημαίνει, ἢ ωσσὸν, ἢ ωσιὸν, ἢ ωρός τι, ἢ ων, ἢ ωστὲ, ἢ κεῖσθαι, ἢ ἔχειν, ἢ ωσιεῖν, ἢ ωάχειν. Ariflot. Præd. p. 24. Edit. Sylb. The passage needs no other translation, than what appears in the Text.

Ch. II. PHILOSOPHICAL ARRANGEMENTS, is a valuable, a copious, and a sublime Theory; a Theory, which, when well understood, leads by Analogy from things fenfible to things intelligible; from Effect to Cause; from that which is passive, unintelligent, and subordinate, to that which is active, intelligent, and supreme; a Theory, which prepares us not only to study every thing elfe with advantage, but makes us knowing withal in one respect, where particular studies are sure to fail; knowing in the relative value of things, when compared one to another; and modest, of course, in the estimate of our own accomplishments *.

This is in fact the necessary confequence of being shewn to what Portion of Being every Art or Science belongs, and how limited that Portion, when compared to what remains. The want of this ge-

^{*} See the last Chapter of this Treatise, p. 462, 463.

neral knowlege leads to an effect the Ch. II. very reverse; so that men, who possess it not, though profoundly knowing in a fingle Art or a single Science, are too often carried by such partial Knowlege to a blameable Arrogance, as if the rest of mankind were busied in pursuits of no value, and themselves the monopolizers of Wisdom and of Truth.—But this by the way.

The distinct discussion of each one of these Categories, Predicaments, Arrangements, or Genera, will become the business of the following Chapters; which discussion, joined to what has been already premised, as well as to such future inquiries, as shall naturally arise in confequence, will include all we have to offer upon this interesting subject (d).

As

⁽d) The Greek Logicians divided their speculations on this subject into three τμήματα, or Sections, calling the first Section, τὸ ωςὸ τῶν κατηγοςιῶν;

D 2

Ch. II. As for Propositions, which have for their materials the simple Terms, here enumerated; and for Syllogisms, which have for their materials the several Species of Propositions; both these naturally make subsequent and distinct Parts of Logic, and must therefore be consigned to some future Speculation.

IF we go back farther, and recur to Theorems of Science, or to Sciences them-

the fecond, το ωερί αὐτῶν κατηγοριῶν; the third, τὸ μετὰ τὰς καληγορίας. Ammon. in Prædic. p. 146.

The Latins, adhering to the same Division, coined new names, Anti-prædicamenta, or Præ-prædicamenta; Prædicamenta; and Post-prædicamenta. Sanderson, p. 22, 51, 55. Edit. Oxon. 1672.

In the present Work, the first Section begins from Chapter the first; the section, from Chapter the third; the third Section, from Chapter the fisteenth. Of these Sections, the second (which discusses the Predicaments, or Philosophical Arrangements) makes the real and effential part of the Speculation: the first and third Sections are only subservient to it; the first to prepare, the third to explain.

felves, these will be found not properly Ch. II. Parts of Logic, but works of a different and higher character; works, where Logic serves the Philosopher for an Instrument or Organ, as the Chizzel serves the Statuary, the Pencil serves the Painter.

AT present we are to proceed to the Speculation concerning Substance.

D₃ CHAP.

C H A P. III.

Concerning Substance natural—how continued, or carried on—Principles of this Continuation, two—increased to three—reduced again to two—these last two, Form and a Subject, or rather Form and Matter.

Ch.III.

O explain how natural Substances originally began, is a task too arduous for unassisted Philosophy. But to inquire after what manner, when once begun, they have been continued, is a work better suited to Human abilities; because to a portion of this Continuity we are personally present, nay within it we ourselves are all included, as so many parts.

Now as to the manner, in which subfifts the Continuity of natural Sub-stances,

flances, and as to the Causes (a) by which that Continuity is maintained; there is no one, it is probable, who imagines every Birth, every recent Production, that daily happens in the Universe, to be an absolutely fresh Creation; a realizing of Non-entity; an Evocation (if it may be so described) of something

⁽a) The Doctrine of Causes, and their different Species, is treated at large in the first volume of these Miscellanies, through the whole Treatise upon Art, and in the Notes subjoined to the same, particularly page 280.

The Author defires to inform his Readers, that in the subsequent disquisitions he hath not confined himfelf merely to Logic, but has interspersed many Speculations of different kinds; acting in this view differently from the Model fet him by the Stagirite. The Stagirite left no Part of Philosophy unexplored, and of course had separate and distinct Treatises for Logic, Physics, and the many other Branches of Science, as well the practical, as the speculative. fo the Author of this Treatife: he by no means pretends to emulate the comprehensive variety of that fublime and acute Genius, whose writings made him for more than two thousand years the admiration of Grecians, Romans, Arabians Jews, and Christians. Such esteem could not have been the effect either of Fashion, or of Chance.

Ch. III. out of nothing.—What then is it?—
'Tis a Change or Mutation out of Something, which was before. It appears, therefore, that to inquire how natural Substances are continued, is to inquire what are the Principles of Mutation or Change.

FIRST, then, let us observe, what is in fact most obvious, that there can be no Mutation or Change, were every thing to remain precisely one and the fame; hot and cold, precisely as they are, one hot, the other cold; so likewise crooked and strait; black and white, &c. On the contrary, Mutation or Change is from one thing into another (b), from

⁽b) Thus Aristotle—Πᾶσα μεταβολή εςιν εκ τινως είς τι. He then subjoins the Etymology of the word μεταβολή, to confirm his doctrine—δηλος γάρ εξ τένομα. ΜΕΤ' ΆΛΛΟ γάρ τι, εξ το μεν ωρότερου δηλος, το δ' υξερον. Even the Name (fays he) shews it; for 'tis something after something else; and one of these things denotes prior, the other denotes subsequent. Physic. lib. v. c. 1. p. 95. Edit. Sylb.

hot into cold, or from cold into hot; Ch.III. from strait into crooked, or from crooked into strait; and so in other instances. It follows hence, that the *Principles* of Mutation or Change are necessarily Two; one, a Principle, out of which; the other, a Principle INTO which.

AGAIN, these two Principles are not merely casual and temerarious (c). Hot changes not into Crooked, but into Cold; Crooked not into Cold, but into Strait; White not into Moist, but into

⁽c) Thus the fame Author— Απάντων τῶν ὄντων ἐσοῦν ὅτε τος οντων ἐσοῦν ὅτες κόθε γίγνεἰαι ὁτιᾶν ἐξ ὁτουῦν— ἀλλὰ λεῦνον μὲν γίγνεἰαι ἐξ ἐ λεύκε, κὸ τέτε ἐκ ἐκ τω αντὸς, ἀλλ ἐκ μέλαν το πῶν μεταξὺ, κὸ μεσικὸν κ. τ. λ. Universally with regard to all Beings whatever, no one Being is formed by Nature either to act upon any other indifferently, or to be acted upon indifferently; nor is any thing produced or generated [indiscriminately] out of any thing produced or generated or produced out of something Not white; and this, not every thing that may be so called, but either out of Black, or some of the intermediate Colours: The same holds as to the production of what is Musical, εc. Arist. Phys. 1. i. c. 5. p. 14. Edit. Sylb.

Ch.III.

Black; Moist not into Black, but into Dry. The same holds in other instances more (d) complicated. The becoming a Statue is a Change from indefinite Configuration into definite; the becoming a Palace, a Change from Dispersion into Combination, from Disorder into Order. Already the Principles, which we investigate, have appeared to be Two; and now it surther appears that they must be Contraries (e) or Opposites.

⁽d) Καὶ τὰ μὴ ἀπλᾶ τῶν ἴντων, ἀλλὰ σύνθετα, κατὰ τὸν αὐτὸν ἔχει λόγον—ἡτε γὰρ οἰκία γίνεται ἐκ τε μὴ συἵκεῖσθαι, ἀλλὰ διηρῆσθαι ταδὶ ώδι· κὸ ὁ ἀνθρίας κὸ τῶν ἐχημαισμένων τι ἐξ ἀχημοσύνης, κὸ ἔκαςον τέτων τὰ μὲν τάξις, τὰ δὲ σύνθεσίς τίς ἐςιν. Beings too, which are not simple, but composite, admit the same reasoning—for the House is formed from certain Materials, which are not previously so compounded [as to make a House], but which lie separate; and the Statue, and every one of those things, which have Figure given them, are formed out of something, which wants that Figure; and each Production has a different Name, sometimes'tis Order, sometimes'tis Composition. Arist. Phys. 1. i. c. 5. p. 14, 15.

⁽e) See the same Author in the same Treatise, p. 11, 12, &c. See also the Quotation in the Text from

AUTHORITY is not wanting to countenance this last position. The Scripture (f) tells us, that the Earth in the beginning was without form, and void, and darkness was upon the face of the deep. After this it became enlightened, as well as replenished; replenished with various Forms both Vegetable and Animal; enlightened by the sublime Command of, Let there be Light, and there was Light. In the whole of this Progress we may remark Contrariety; Formless opposed to Form; Void to Replenished; and Darkness to Light.

Among the ancient Philosophers, some held the Principles of things to be hot and cold; others, to be moist and dry; others, to be dense and rare; others, in a

from Scripture, which immediately follows, as well as the subsequent Notes.

⁽f) Genesis, chap. i.

Ch.III. more abstracted way, to be Excess and Defect; Even and Odd; Friendship and Strife. Among the moderns, we know the stress laid on Action and Re-action; Attraction and Repulsion; Expansion and Condensation; Centripetal and Centrifugal: to which may be added those two Principles held by many Ancients as well as Moderns, the Principles of Atoms and a Void (g), which two stand opposed nearly as Being and Nonbeing.

> WE shall subjoin the following passage from a Treatife of ancient date, because in it the Force of Contraries is exemplified with elegance.

⁽g) Democritus, fays Aristotle, holds THE SOLID and the Void, To segeou x x xevou, to be PRINCIPLES, ων το μεν ώς ον, το δ' ώς έκ ον είναι Φησι, of which he fays the one is the same as BEING, the other the same as Non-Being. See Arist. Phys. 1. i. c. 5. p. 13. See also c. 4. p. 11. where the other Contraries are explained at large.

" Some (fays an ancient Author) (h) Ch.III.

" have wondered how the World, if it be

composed, as it appears, out of con-

"TRARY PRINCIPLES (the Dry, the

" Moist, the Cold, and the Hot) has not

" for ages ago been ruined and destroyed.

" As if indeed men should wonder how a

"City could subsist, composed (as it is) out

See Fabricius's Biblioth. Grac. T. ii. p. 127, where the learned Author, with his usual labour and accuracy, has collected all the sentiments both of Antients and Moderns on this valuable work.

⁽b) See the Treatife Περί κόσμε — It is given to Aristotle, and always makes a part of his Works; but although it be of genuine antiquity, and truly fublime, both in language and fentiment, yet fome have thought it of a later period, and not written in the close manner and style of Aristotle. A Translation of it is extant, as old as by the Philosopher Apuleius, besides other Translations more modern. The Tract itself stands the fifth in the volume of Aristotle's Physical Pieces, according to Sylburgius's edition, and the passage here translated may be found, cap. 5. page 12. of that edition, beginning at the Words, Καί τοι γέ τις έθαύμασε ωως ωολε εί έκ των έναντίων κ. τ. λ. In Apuleius the words are, Et quibusdam mirum videri solet, quod, cum ex diversis, &c. p. 731. Edit. in U/um Delphini. Quarto.

Ch.III.

" of contrary Tribes (I mean the Poor " and the Opulent, the Young and the " Aged, the Weak and the Strong, the "Good and the Bad), and be ignorant that sthis of all things is most admirable in " Political Concord; I mean, that by ad-" mitting every Nature and every Fortune, "it forms out of MANY dispositions ONE " disposition; and out of Dissimilar ones, a " Similar. Perhaps also NATURE herself " has an affection for Contraries, and 66 chooses out of these to form the Conso-" nant, and not out of things similar; so " that in the same manner as she associated " the Male to the Female, and not each to " it's own Sex, did she establish through " Contraries, and not Similars, the first " and original Concord. ART too, in imi-" tation of Nature, appears to do the same. " Thus Painting, by blending the Natures " of things white and black, pale and red, " produces Representations consonant to "their originals. Thus Music, by mixing " together Sounds that are sharp and flat, ss that that are long and short, out of different Ch. III.

voices produces one Harmony. Thus

"Grammar, by forming a mixture out of

"Vowels and Mutes, through these hath

" established the whole of it's Art. And

"this is what appears to have been the

" meaning of that obscure Philosopher He-

" raclitus. You are, says he, to connect the

" Perfect and the Imperfect, the Agree-

" ing and the Disagreeing, the Consonant

" and the Dissonant; and out of All

"THINGS, ONE; AND OUT OF ONE,

" ALL THINGS."

Thus far this ingenious Author, with regard to whose doctrine, as well as that of the many others already mentioned, we cannot but remark, that whatever may have caused such an *Unanimity* of opinion, whether it were that men adopted it from one another by a fort of Tradition, or were insensibly led to it by the latent force of Truth; all Philosophers, of all ages, appear to have fa-

voured

Ch.III. voured Contrariety, and given their fanction to the Hypothesis, that Principles Are Contraries (i).

But farther still—'Tis impossible for Contrarieties to co-exist, in the same place, at the same instant. 'Tis impossible, for example, that in the same place and instant should co-exist Cold and Hot; Crooked and Strait; Dispersion and Combination; Disorder and Order. As therefore the Principles of Change are Contraries, and Contraries cannot co-exist, it follows that one Principle must necessarily depart, as the other accedes. Thus in the Mutation out of Disorder into Order, when the Principle into which,

⁽i) Πάντες γὰς τὰ τοιχεῖα κὶ τὰς ὑπ' αὐτῶν κατλεμένας ἀςχὰς, καίπες ἄνευ λόγε τιθέντες, ὅμως τὰναντία λέγεσιν, ὥσπες ὑπ' αὐτῆς τῆς ἀληθείας ἀναίκασθένες. For ALL Philosophers hold the Elements and those other Causes, which they call PRINCIPLES (though they suppose them without giving a reason) to be Contraries, compelled as it were to do so by Truth itself. Aristot. Phys. 1. i. c. 5. p. 15.

that is Order, accedes, the Principle OUT Ch. III. of which, that is Diforder, departs. The same happens in all other instances.

A QUESTION then arises. If one of them necessarily depart, as soon as the other accedes, how can Nature posfibly maintain the Continuity of her Productions? To depart, is to be no more, a fort of Annihilation, or Death; to accede, is to pass into Being, a sort of Production or Birth. They cannot co-exist, because they are absolutely incompatible (k); so that upon this Hypothesis there

⁽k) Το μη ωσιείν δύο μόνου, έχει τινά λόγου άπορήσειε γαρ αν τις, ωως ή ωυκνότης την μανότη α ωοιείν σέρυκεν, η αυτή την συκνότη α όμοίως δε κη άλλη όποιανεν ένανδιότης. That we should not make TWO PRINCIPLES only, has some appearance of reason: for a man may well doubt, bow Density should be formed by nature to make Rarity, or this last, Density; and so in like manner with respect to any other Contrariety whatever. Arift. Phys. 1. i. c. 6. p. 16.

Simplicius well observes—το μεν γάρ ωσιεν είς ύπομένον τι ωσιεί. το δε εναυδίον εχ ιπομένει το εναντίου -That

Ch.III. there can be no Continuity at all, but every new Production must be a realizing of Non-entity, a fresh and genuine Evocation of something out of nothing.

If this in the Continuity of Beings appear a difficulty, let us try, whether we can remove it by any aid not yet suggested. Crooked, we are told, is changed into Strait, a Contrary into a Contrary; one of which necessarily departs, and the other accedes. We admit it.—But is there not Something, which during the Change, neither departs nor accedes? Something which REMAINS, and is all along still one and the SAME (1).

THE

[—]That, which acts, acts upon something which remains; but Contrary does not remain and wait for Contrary. Simpl. in Præd. p. 43. B. Edit. Basil. 1551.

⁽¹⁾ Και τέτο όρθως λέγει Διογένης, ότι εί μη ην έξ. ένος άπανία, έκ αν ην το ωοιείν ης ωάχειν ύπ' άλλήλων' οΐου το θερμου ψύχεσθαι, η τέτο θερμαίνεσθαι πάλιν'

Ch. His

THE Stick, for example, changes from Crooked into Strait; and if there was not a Stick; or fomething analogous, no

wάλιν ε γας ή Θερμότης μελαβάλλει ης ή ψυχρότης είς άλληλα, άλλα δηλον, ότι το υποκείμενον ώς ε εν οῖς το ωσιείν εκί ης το ωάχειν, ἀνάγκη τέτων μίαν είναι την υποκειμένην Φύσιν.— And this is rightly faid by Diogenes, that if all things were not out of ONE thing, it would not be possible for them to act, or be acted upon by one another; for example, that, what is bot, should become cold; or reciprocally, that this should become hot; for 'tis not the Heat or the Coldness, which change into one another, but 'tis that evidently changes, which is the Subsect of these Affections: whence it follows that in those things, where there is acting, and being acted upon, 'tis necessary there should belong to them some ONE Nature; their COMMON Subject. Arist. de Gener. et Cor. lib. i. c. 6. p. 20. Edit. Sylb.

Aristotle, who gives this quotation, well remarks; that it was too much to affirm this of all things, but that it should be confined to such things only as reciprocally acts, and are acted upon; and so in his Comment we may perceive he restrains them.

See more of this ONE Being, the common Subject, or Subftratum, in the following Chapter.

The Diogenes here mentioned was a contemporary of Anaxagoras, and lived many years before the Cynic of the fame name. See Diog. Laert. ix. 57.

Such

Ch. III. fuch Change could be effected. Yet is it less a Stick for becoming Strait; or was it more so, when Crooked? Does it not remain (m), confidered as a Stick, precisely,

(12) 'Ότι δεί αεί τι υποικείσθαι το γιδυόμενου, κ τετο εί κ αριθμώ ές ν εν, αλλ' είδει γε έχ εν (τὸ γαρ είδει λέγω, κη λόγω ταυτόν.) ε γαρ ταυτον άνθρώπω κὶ τῷ ἀμέσω εἶναι κὶ τὸ μὲν ὑπομένει, τὸ δ' έχ ύπομένει το μεν ύποκείμενον ύπομένει (ό γαρ ανθρωπ (ὑπομένει) το δὲ άμεσον εχ' ὑπομένει. 'Tis neceffary that in every Production there should be a Subject [or a Substratum], and this, though One numerically, yet not One in Form (I mean, by one in Form, the same as One in Reason, in Detail, or Definition). Thus 'tis not the same thing to be a Man, and to be a Being Immustcal, or Void of musical Art. [In the formation of a Musician the one remains, the other remains not; the Subject or Substratum remains (for Man remains); the being Immusical, or Void of musical Art, remains not ffor that is loft, as foon as he becomes an Artift.] Arift. Phys. l. i. c. 7. p. 18. Edit. Sylb.

The Production, or Formation here spoken of, means the becoming a Musician by the acquisition of the musical Art. The same reasoning may be applied to any other Art or Science, which Man, as Man, is capable of acquiring.

Again, the fame Philosopher—"Ετι το μεν υπομένει, το δ' ενανδίου εχ υπομένει: εςιν άζα τι τρίτου σαAs therefore the Stick is to Crooked and Strait, so is the Bar of Iron to Hot and Cold; the Brass of the Statue to Figure and Deformity; the Stones of the Palace to Order and Confusion; and something, analogous in other Changes, to other Contraries, not enumerated.

If therefore we were right in what we afferted before, and are so in what we affert now; it should seem that THE PRINCIPLES OF CHANGE OF MUTATION WERE THREE (n); ONE, that which departs;

ρὰ τὰ ἐναντία. Add to this (fays he) there is some-THING [in productions of all kinds] WHICH RE-MAINS; but the Contrary does not remain; there is therefore some THIRD thing over and above the Contraries. Metaph. A. p. 196. Edit. Syib.

If there appear a difficulty in the first quotation of this note, concerning a Subject being One numerically, but not so in Form, or Character, see Note on the word Privation, in the first part of the following Chapter.

⁽n) Διόπες, εἴ τις τόν τε ωςότεςον αληθή νομίσειεν εἶναι λόγον, χ τέτον αὐαγκαῖου, εἰ μέλλει διασώσειεν Ε 2 αμφο-

Ch. III. parts; ANOTHER, that which accedes; and a THIRD, that which remains. Take an example or two from Man. The healthful departs; the morbid accedes; the Body remains. The morbid departs; the healthful accedes; the Body remains. 'Tis thus we change reciprocally as well to better, as to worse.

αμφοτέρες αὐτες, ὑποτιθέναι τι τρίτον—If any one therefore think the former Reasoning, and the present Reasoning, to be each of them true; 'tis necessary, in order to preserve both of them intire and unimpeached, to lay down and establish some THIRD PRINCIPLE.

He foon after adds—το μεν εν τρία Φάναι τὰ τοιχεῖα εἶναι, ἔι τε τέτων κὰ ἐκ τοιέτων ἄλλων ἐπισκοπεσι δόξειεν ὰν ἔχειν τινὰ λόγον. Το say therefore that the Elements [or Principles of Things] are Three, may appear to have some foundation to those, who speculate from these and other Reasonings of like sort. Arist. Phys. 1. i. c. 6. p. 16, 17. Edit. Sylb.

And again more explicitly in his Metaphyfics—
Τρία δη τὰ αἴτια, κὰ τρεῖς αὶ ἀρχαί δύο μὲν ἡ ἐναντίωσις (ῆς τὸ μὲν λόγ & κὰ εἶδ , τὸ δὲ εξρησις) τὸ
δὲ τρίτον ἡ ὅλη.—Wherefore the Causes of Things are
THREE, and the Principles are THREE; two, the ConTRARIETY (of which Contrariety one part is the DEFINITION and FORM; the other part, the PRIVATION);
and the third Principle, the MATTER. Metaph. A. p.
197. Edit. Sylb.

It may be observed of these three Ch.III.

Principles, that two of them, being

Contraries, maintain a perpetual warfare:

Haud bene conveniunt, nec in una sede

the third, like a neutral Power, preferves an intercourse with both, and sometimes affociates with one, and sometimes with the other. It may be observed also of the two hostile or contrary Principles, that one of them appertains for the most part to the better Co-arrangement (o) of things, and one

to

⁽⁰⁾ Co-ARRANGEMENT.—So I here ventured to translate the word Συσοιχία, or Συσοιχεία, for it is written both ways in *Ariftotle*. See *Metaph*. l. i. c. 5. p. 13. l. iii. c. 2. p. 52. *Edit*. Sylb.

The Pythagoreans, observing through the world a difference in things as to better and worse, and that this difference often led to a fort of Contrariety or Opposition, arranged them into two Classes, a better Class and a worse; and, placing the two Classes by the side of each other, called them Existing, or Co-arrangements. In the better Class E 4.

Ch. III. to the baser; to the better appertains Figure; to the baser, Deformity; to the better, Order; to the baser, Confusion; to the better, Health; to the baser, Disease. Now if we call those of the better Tribe by the common name of FORM, and those of the other Tribe by the common name of PRIVATION (p), diftinguish-

> they put Unity, Bound, Friendship, Good, &c.; in the other they put Multitude, Boundless, Strife, Evil, &c. Some of this school limited the Number, others left it indefinite, confidering all things as double, one against another, according to the Language of Ecclestasticus, chap. xxxiii. v. 14, 15. and chap. xlii. V. 24.

> See (besides the quotations mentioned already) Ethic. Nicom. 1. i. c. 6. p. 15. Edit. Oxon. 1716. and Eustratii Com. in Ethic. Nic. p. 13. B.

> (ρ) Των εναυτίων ή ετέρα συσοιχία, σέρησις-The OTHER CO-ARRANGEMENT of Contraries is PRI-VATION. Aristot. Metaph. 1. 3. c. 2. p. 52. Edit. Sylb.

> By the word other, he means the baser and subordinate Class, to which Class he gives the common name of PRIVATION, as including all the Genera therein enumerated, Strife, Evil, &c. And hence it

tinguishing the neutral Principle withal Ch.III. by the name of Subject, we shall then find the three Principles of Mutation, or Change, to be FORM, PRIVA-TION, and a SUBJECT.

Or these three, if we compare Form to PRIVATION, we shall find FORM to be definite and simple; PRIVATION to be infinite and vague. Thus there are infinite ways of being difeafed, though but one of being healthy; infinite ways of being vicious, though but one of being virtuous (q).

Should it be asked, how Privation is ONE, having this infinite and vague Character; we may answer, because as Privation,

is, that Privation is in this Treatife foon after called infinite and vague; for το 'Απειρον, Infinite, made one in this baser Arrangement. See Blemmidæ Epitom. Physic. p. 60. Philop. in Arist. Phys. lib. i. sub fin.

⁽q) Έσθλοι μεν γάρ άπλως, σανδοδαπώς δε κακοί. Theognis.

Ch.III.

it is nothing more than the simple Absence of that Form, to which it is opposed. Thus to be diseased (though the ways are infinite) is nothing more than the Absence of Health; to be vicious, (though the ways are infinite) nothing more than the Absence of Virtue.

And hence, perhaps, it may be posfible to reject PRIVATION for a Principle, and supply it's place, when wanted, by it's Opposite, that is to say Form; not however by the specific Form then actually tending to existence, but by every other congenial Form, of which this Specific Form is the Privation. Thus in the producing of the Sphere, it's Privation may be found in the Presence of the Pyramid, or of any Figure, besides the Sphere, whether regular or irregular. Thus in the producing of that Harmony called the Diapason, it's Privation may be found in the Presence of the Diapente, or of any other Tensions, besides those of the Octave, be they confo- Ch.III. nant or dissonant. 'Tis certain that by fuch a reciprocal acceding and receding of all possible Forms, by fuch an Absence and Presence (r), by such a continued Revolution

On this passage, Themistius thus comments.—Having inferted the words above quoted, he fubjoinsώςε το Είδω την χώραν αποπληροί ης της Στερήσεως. ή γαρ Στέρησις ε Φύσις τις κ Είδω ές ίν, αλλ' απεσία τε Είδες. So that the FORM supplies also the place of the PRIVATION; for the PRIVATION is itself no particular Nature or Form, but rather THE ABSENCE OF THE FORM [which is then passing into existence]. Themist. in Arist. Phys. p. 21. B. Edit. Ald.

Simplicius on this occasion explains himself as follows- & μέντοι ηξίωσεν έν τοις σοιχείοις θείναι την Στέρησιν ης το κατ' αύτην μη δυ, διότι απεσία μόνον εςὶ τε ωεφυκότο, έδεν άλλο έαυτη συνεισάγεσα ήρμέσθη δε τῷ Είδει μόνω κ αὐτὸς, τῆ ωαρεσία τῆ έαυτε κ τη απεσία δυναμένω την γένεσιν κ την Φθοραν ojnodidovas. - Aristotle has not deigned to place among the Elements

⁽r) - Ίκανου γαρ έσαι το έτερου των έναυτίωυ τοιείν τη ἀπεσία ης σαρεσία την μεταβολήν - One of the two Contraries (that is to fay FORM) will be fufficiently able, by it's ABSENCE and it's PRESENCE, to effect Mutation. Aristot. Phys. 1. i. c. 7. p. 20. Edit. Sylb.

Ch.III. lution and periodical Succession, supposing a proper SUBJECT withal to receive

and

Elements [of Natural Productions] PRIVATION, and that Mode of Non-being, which is confonant to it; because Privation is no more than the Absence of the thing produced, introducing along with itself no other particular Attribute. He himself also has been satisfied with the FORM alone, as being able by it's PRESENCE and it's ABSENCE to effect both Generation and Dissolution. Simplic. in Aristot. Phys. lib. i. p. 54. Edit. Ald. Fol. 1526.

Perhaps Simplicius alludes to what Aristotle fays in the following passage. H δέ γε μόρφη κ ή φύσις διχως λέγεται κ γάρ ή σέρησις είδος ωως εςίν. The Terms FORM and NATURE have a double meaning: for in one Sense even PRIVATION is FORM. Physic. Aristot. 1. ii. c. I.

Philoponus gives a pertinent instance to explain, how Privation may be Form. He tells usή γαρ Λύδι άρμονία γίγνε αι έκ της αναρμοςίας της Λυδίε ἀλλ' ή Λύδι αναρμοςία δύναται είναι Φρύγι το άρμονία, η έτέρα τις δύναται δε κλ άπλως αναρμοςία είναι των χορδων όπωσεν έχεσων, κ) τέτο ωοικίλως άλλοξε άλλως επιτεταμένων μαλλου, ή ανειμένων.—The Lydian Mode or Harmony is made out of Lydian Dissonance [that is, before the strings of a Lyre were tuned to that Mode, they were tuned after another manner, which manner he calls properly, Lydian Diffonance]. Now Lydian Diffonance and give them up, we may conceive how Ch.III. Changes may be performed, and new Substances produced, though (as we have faid already) the Principle of Privation were to be withdrawn. No harm accrues to the Doctrine from a supposition like this; only, if we admit it, we again reduce the Principles from three to two; not however the former two, those that exist in Contrariety, for now we adopt the more amicable ones, those of a Form and a Subject (t), or (if

may be the Phrygian Mode or Harmony, or it may be any other of the Modes [Doric, Ionic, &c.]; it may also be simply the Dissonance of the Strings under any casual tension, and that in various and different ways, either as they are more stretched, or more relaxed [that is, either sharper or flatter.] Philop. in Physic. 1. i. p. 45.

This shews that the *Phrygian* Mode in this example, though clearly a *Form* of Harmony, is nevertheless, when referred to the *Lydian* Mode, as much a *Privation*, as any *cafual* Tension of the Strings, totally void of all Concord.

⁽t) This is implied in the words—"Οτι γίγνεται ἄπαν ἔκ τε τε ὑποκειμένε κὰ τῆς μος Φῆς. That every thing

Ch.III. (if we take Matter in it's proper means ing) those of Form and MATTER.

'Tis in these we behold the Elements' of those composite Beings, NATURAL SUBSTANCES. The Disquisition makes it expedient to consider each of the two apart, and this we shall therefore do by beginning with MATTER.

thing is made or produced out of a Subject and a Fi-Gure. Arift. Phys. 1. i. c. 7. p. 19.

FIGURE, Mogon, means the fame with Elders Form; Twonsimeror, Subject, means the fame with Tan, Matter. See the Treatife just quoted, particularly towards the conclusion of the first Book.

C H A P. IV.

Concerning MATTER—An imperfect Description of it-it's Nature, and the Necessity of it's existence, traced out and proved—first by Abstraction—then by Analogy-Illustrations from Mythology.

ATTER is that Elementary Con- Ch.IV., flituent in composite Substances, which appertains in COMMON (a) to them all, without distinguishing them from one another.

(a) If we compare the beginning of this Chapter with the beginning of the following, it will appear that, though MATTER and FORM are the ELE-MENTS, or inherent Parts of every composite Substance; yet they effentially differ, in as much as Matter being COMMON, Form PECULIAR, Form gives every fuch Substance it's Character, while Matter gives it none.

Thus Philoponus—xar' auto yao [to Eid & scil.] χαρακτηρίζουλαι τὰ πράγμαλα, κατὰ δὲ τὴν Υλην 8δεν αλλήλων διαφέρυσι. - By FORM things are characterised; by MATTER they differ not one from another.

Ch.IV. another.—But 'tis fitting to be more ex-

Every thing generated or made, where ther by Nature or Art, is generated or made out of fomething else; and this fomething else is called it's Subject or Matter. Such is Iron to the Saw; such is Timber to the Boat.

Now this Subject or Matter of a thing, being necessarily previous to that thing's existence, is necessarily different from it, and not the same. Thus Iron, as Iron, is not a Saw; and Timber, as Timber,

Com. in Phys. Arist. p. 55. d.—And soon after —διότι αὐτὸ χαραπτηριςικόν ἐςι τῆς ἐκάςκ ἐσίας ἡ γὰρ ဪ, κοινή.—This [that is, the FORM] is CHARACTERISTIC of every Being's Essence; for as to the MATTER, it is COMMON [and runs through all.]

Ammonius fays expresty—ή μεν γαρ "Υλη κοινωτίας ες ν αιτία τοις πράγμασι, το δε Είδω διαφοράς.—

ΜΑΤΤΕΝ with regard to things is the Cause of their general Community, or common Nature; Form, the Cause of their peculiar Difference. Ammon. in Cat. p. 25. B.

ter of every Subject or Matter, that is, the Character of NEGATION or PRIVA-

AGAIN, though the Subject or Matter of a thing be not that thing, yet were it incapable of becoming so, it could not be called it's Subject or Matter. Thus Iron is the Subject or Matter of a Saw, because, though not a Saw, it may still become a Saw. On the contrary, Timber is not the Subject or Matter of a Saw, because it not only (as Timber) is no Saw, but can never be made one, from it's very nature and properties. Hence then, besides Privation, another Character of every Subject or Matter, and that is the Character of Apritude or Capacity.

AGAIN, when one thing is the Subject or Matter of many things, it implies a Privation of them all, and a Capacity to

Ch.IV. them all (b). Thus Iron, being the Subject or Matter of the Saw, the Axe,

(b) PRIVATION and CAPACITY are effential to every thing, which bears the name of MATTER; and this is the meaning of the following passage-Εςι δε το ύποκείμενου άριθμώ μεν εν, είδει δε δύο-The Subject or Matter is one numerically, but in character it is Two, that is to fay, Two, as it has a Capacity to become a thing, and yet is under a Privation, till it actually become fo. Arift. Physic. 1. i. p. 17. -- And foon after, he fays- ETEPOU Yap To auθρώπω κὶ τῷ ἀμέσω εἶναι, κὶ τῷ ἀγηματίςω κὶ χαλκῶ. 'Tis a different thing to be a Man, and to be Void of the musical Art; 'tis a different thing to be Void of Figure, and to be Brass .- As much as if he had faid, that the Man, before he became a musical Artist, had both a Capacity for that character, and a Privation of it; the Brass a similar Capacity and Privation, before it was cast into a Statue.

Thus too Themistius—Kai τοι λέγομεν της ύλης τὸ είναι ἐν τῷ δυνάμει ἡ δὲ δύναμις δηλονότι μετὰ ςερήσεως ἐδὲ γὰρ ἔτι δύναμις είη, μη σὺν αὐτῆ πάντως κὰ της ςερήσεως νουμένης—We say the Essence of Matter is in Capacity; and Capacity is evidently connected with Privation; since it would no longer be Capacity, could Privation in no sense be understood, as existing with it. Themist. in Arist. Physic. p. 21. Edit. Ald.

See before, Note p. 52, and Note p. 71.

and the Chiffel, implies Privation and Ch.IV. Capacity with respect to all three.

AGAIN, we can change a Saw into a Chiffel, but not into a Boat; we can change a Boat into a Box, but not into a Saw. The reason is, there can be no Change or Mutation of one thing into another, where the two changing Beings do not participate the same Matter (c).

But

⁽c) This reasoning has reference to what the Ancients called Υλη ωροσεχής, THE IMMEDIATE MAT-TER, in opposition to "Υλη ωρώτη, THE REMOTE OR PRIMARY MATTER, of which more will be faid in the course of this Speculation.

^{&#}x27;Tis of the immediate Matter we must understand the following Paffage— Ευδέχεται δε, μιας της ύλης ซื้อทร, ย้ายคุณ ทุโทยอังโลเ อีเฉิ ทหิง หเหมือนง ฉโทโลง" อโอง ยัน ξύλε η κιδωτός η κλινή ένίων δε έτέρα ή ύλη έξ ανάξκης, έτερων όντων οίου σρίων έκ αν γενοίο εκ ξύλε, έδ ini in nivern airia Tero. - Tis possible, that, the MAT-TER being one and the same, different things by the Efficient Cause should be formed out of it; as, for example, that out of Wood should be formed a Box and a Bed. But then with regard to some things, which are different, the Matter is of necessity different also. 'Tis thus, for examples

Ch.IV. But even here, were the Boat to moulder and turn to Earth, and that Earth by natural process to metallize and become Iron, through fuch progression as this, we might suppose even the Boat to become a Saw. Hence therefore it is, that ALL CHANGE is by immediate or mediate participation of THE SAME MATTER.

> HAVING advanced thus far, we must be careful to remember—first, that every SUBJECT or MATTER implies, as such, PRIVATION and CAPACITY—and next, that all CHANGE or Mutation of Beings into one another, is by means of their participating the same common Matter. This we have chosen to illustrate from Works of Art, as falling more eafily under human cognizance and observation. 'Tis however no less certain as to the

example, that a Saw cannot be made out of Wood; nor is this a work in the power of the Efficient Cause. Arist. Metaph. Η. κεΦ. δ. p. 138. Edit. Sylb.

Productions of Nature, though the fu- Ch. IV. perior Subtlety in these renders examples more difficult.

THE Question then is, whether in the World which we inhabit, it be not admitted from Experience, as well as from the Confession of all Philosophers, that Substances of every kind, whether natural or artificial, either immediately or mediately pass one into another; that we suppose at present no Realizings of Non entity, but that reciprocal Deaths, Dissolutions, and Digestions, support by turns all Substances out of each other, fo that, as Hamlet says, from the Idea of this rotation,

Imperial Cæsar, dead and turn'd to clay, May stop a hole, to keep the winds away.

The Question in short is, whether in this World which we inhabit, there be not an F 3 uniCh.IV. univerfal Mutation of all things into all (d).

If there be, then must there be some ONE

PRI-

(d) The Peripatetics, according to the erroneous Astronomy by them adopted, supposed the fixt Stars, the Planets, the Sun, and the Moon, to move all of them round the Earth, attached to different Spheres, which moved and carried them round, the Earth itfelf being immoveable, and placed in the Centre of the Universe. This Motion, purely and simply loeal, was the only one they allowed to these Celestial Bodies, which in Essence they held to be perfectly unchangeable. Things on the furface of this Earth (fuch as Plants and Animals), and things between that furface and the Moon (fuch as Clouds, Meteors, Winds, &c.) these they supposed obnoxious to Motions of a more various and complicated character; Motions, which changed them in their Qualities and Quantities, and which even led to their Generation and Diffolution, to Life and to Death. Hence the whole Tribe of these mutable and perishable Beings were called sublu-WARY, because the Region of their existence was beneath the Sphere of the Moon. 'Twas here existed those Elements, which, as Milton tells us,

Perpetual circle, multiform, and mix
And nourish all things—— Par. Lost.

*Twas here that Aristotle held— στι ωαν έκ ωαντός γίνεσθαι ωέφυκε, that every thing was naturally formed to arise PRIMARY MATTER, common to all things; Ch.IV.

I fay, fome one PRIMARY MATTER,
and that Common to all things, fince,
without fome fuch Matter, fuch Mutation
would be wholly impossible.

But if there be some one Primary Matter, and that common to all things; this Matter must imply, not (as particular and subordinate Matters do) a particular Privation, and a particular Capacity, but, on the contrary, Universal

PRI-

arise out of every thing. Lib. de Ortu et Int. p. 39. Edit. Sylb.

Ocellus Lucanus (from whom, and from Archytas, Timæus, and the other Pythagoreans, both Plato and Aristotle borrowed much of their Philosophy) elegantly calls this imaginary Sphere of the Moon's orbit, iσθμος άθανασίας κη γενήσεως, the Isthmus of Immortality and Generation, that is, the Boundary, which lies between things immortal, and things transitory. Gale's Opusc. Mythog. p. 516.

The Stoics went farther than this Ishmus.—They did not confine these Changes to a Part only of the Universe; they supposed them to pass through the F 4 whole;

Ch.IV. PRIVATION, and UNIVERSAL CAPA-

If the notion of fuch a Being appear ftrange and incomprehensible, we may farther prove the *necessity* of it's existence from the following considerations.

whole; and to continue without ceasing, till all was at length lost in their Ἐκπύρωσις, or general Conflagration, after which came a new World, and then a new Conflagration, and so on periodically. Diog. Laert. vii. 135, 141, 142.

(e) Το πρώτον υποκείμενον, δυνάμενον άπάσας δέχεσθαι τὰς μορφάς, ἐν σερήσει μέν ἐςιν άπασῶν— The PRIMARY SUBJECT or MATTER, having a CA-PACITY to admit all Forms, exifts in a PRIVATION of them all. Themist. in Arist. Phys. p. 21.

Themistius well distinguishes between two words, expressing the same Being, I mean ὑποκείμενου and ὑλη. The first he makes the Subject or Substratum of Something ACTUALLY existing; the other, that Matter which has a CAPACITY of becoming many things, before it actually becomes any one of them.

This is that ONE Being, mentioned by *Diogenes*, whose words we have quoted in the preceding Chapter, p. 51, in the Note.

Change, as here spoken of, which is contrary to fact, and would destroy the Sympathy and Congeniality of things; or if there be, there must be a Matter of the character here established, because without it (as we have said) such Change would be impossible.

ADD to this, however hard universal Privation may appear, yet had the Primary Matter in it's proper nature any one particular Attribute, so as to prevent it's Privation from being unlimited and universal, such Attribute would run thro all things, and be conspicuous in all. If it were white, all things would be white; if circular, they would be circular; and so as to other Attributes, which is contrary to fact (f). Add to this, that the

⁽f) This Argument is taken from Plato. - Speaking of the primary Matter, he says - δμοιον γας ον των

Ch.IV. Opposite to such Attribute could never have existence, unless it were possible for the same thing to be at once and in the same instance both white and black, circular and rectilinear, &c. since this inseparable Attribute would necessarily be every where, because the Matter, which implies it, is itself every where, at least

έπεισιόντων τινὶ, τὰ τῆς ἐναντίας, τά τε τῆς ωαράπαν ἄλλης Φύσεως, ὁπότ' ἔλθοι, δεχόμενον, κακῶς ἄν ἀφομοιοῖ, τὴν αὐτὰ ωαρεμΦαίνων ὄψιν—Were it like any of those things that enter into it, in such case, when it came to receive things of a nature contrary and totally different from itself, it would exhibit them ill, by shewing IT'S OWN NATURE ALONG WITH THEM at the same time. Plat. Tim. p. 50.

Thus Chalcidius, in commenting the Passage here quoted—Si sit aliquid candidum, ut ψιμμύθιον, deinde oporteat hoc transferri in alium colorem, vel diversum, ut ruborem sivi pallorem, vel contrarium, ut atrum; tunc candor non patietur introeuntes colores synceros perseverare, sed permixtione sui faciet interpolatos. Chalcid. in Tim. Com. p. 434.

Hence we see the propriety of those descriptions, which make the primary Matter, to be void of Body, of Quality, of Bulk, of Figure, &c. ἀσώμαθο, ἄποιο, ἀμεγέθης, ἀχημάτις δ, ἄμοςΦο, κ. τ. λ.

may be found in all things, that are ge- Ch.IV. nerated and perishable.

HERE then we have an Idea (fuch as it is) of that fingular Being, ΥΛΗ ΠΡΩΤΗ, the PRIMARY MATTER; a Being, which those Philosophers, who are immerged in sensible Objects, know not well how to admit, though they cannot well do without it (g); a Being, which slies the Percep-

⁽g) So strange a Being is it, and so little comprehenfible to common Ideas, that the Greeks had no name for it in their language, 'till YAH came to be adopted as the proper word, which was at first only assumed by way of Metaphor, from signifying Timber or Wood, the common materials in many works of Art. Hence it was that Ocellus, Timæus, and Plato, employ various words, and all of them after the fame metaphorical manner, when they would express the nature of this mysterious Being. Ocellus calls it Handexes n' Enmayeion The yeverews, the universal Recipient, and Impression of things generated, as Wax receives Impressions from various Seals. Timeus uses the word YAA in the Doric Dialect, and explains it (like Ocellus) by Expayerov, to which he adds the Appellations of Mariea no Tidavar, Mother and Nurse.

Ch.IV. Perception of every fense, and which is at best even to the Intellect but a negative object, no otherwise comprehensible than either by ANALOGY or ABSTRACTION.

WE gain a glimpse of it by ABSTRAC-TION, when we say that the first Matter is not the Lineaments and Complexion, which make the beautiful Face; nor yet the Flesh and Blood, which make those Lineaments, and that Complexion; nor yet the liquid and solid Aliments, which

Nurse. Plato calls it first wάσης γενέσεως ὑποδοχην, οιου τιθήνην, the Receptacle of all Generation, as it's Nurse—then wαντὸς αἰσθητῶ μητέρα κὰ ὑποδοχην—the Mother and Receptacle of every sensible Object. Gale's Opusc. Mytholog. p. 516. 544. Platon. Tim. p. 47. 51. Edit. Serr. See Hermes, p. 308, &c.

Aristotle also observes, consistently with one of the above expressions—ή μεν γαρ υπομένεσα, συναιτία τη μος Φη των γινομένων ές ιν, ωσπερ μήτης—that the Matter, by remaining, is in concurrence with the Form, a Cause of things generated, under the character of a Mother. Phys. l. i. c. 9. p. 22. Edit. Sylb.

make that Flesh and Blood; nor yet the simple Bodies of Earth and Water, which make those various Aliments; but Something, which being below all these, and supporting them all, is yet different from them all, and essential to their existence (h).

WE obtain a fight of it by ANA-LOGY, when we say, that as is the Brass

Thus Chalcidius—Sublatis quæ sunt singulis, QUOD SOLUM REMANET, IPSUM ESSE, QUOD QUÆRITUR. In Tim. Com. p. 371.

⁽h) ABSTRACTION appears to have been used by Plato-Διο την τε γείονότ 🕒 όρατε κ σαντός αίσθητε μητέρα κο ὑποδοχην μήτε γην, μήτε ἀέρα, μήτε τουρ, μήτε ύδωρ λέγωμεν, μήτε όσα έχ τέτων, μήτε έξ ών ταῦτα γέγουεν άλλ ἀδραίον εἶδός τι κλ ἄμορΦου, πανδεχές μεταλαμβάνον δε απορώταλά ωη τε νοητε, κ δυσαλωτότα ου αυτο λέγον ες, & ψευσόμεθα. - Let us therefore say that THE MOTHER and RECEPTACLE of every visible, nay of every sensible Production, is neither Earth, nor Air, nor Fire, nor Water, nor any of the things which arise out of these, nor out of which these arise, but a certain INVISIBLE AND FORMLESS BE-ING, THE UNIVERSAL RECIPIENT; concerning which Being, if we say it is in a very dubious way intelligible, and something most hard to be apprehended, we shall not speak a falshood. Plat. Tim. p. 51. Edit. Serr.

Ch.IV. to the Statue, the Marble to the Pillar, the Timber to the Ship, or any one fecondary Matter to any one peculiar Form; fo is the FIRST and ORIGINAL MAT-TER to all Forms in general (i).

AND

(i) The Method of reasoning on this Subject by Analogy was used by Aristotle. - n o' unones meun Ouσις έπις ητη κατα αναλογίαν ώς γαρ ωρός ανδριάνδα χαλκός, η ωρός κλίνην ξύλον, η ωρός των άλλων τε των έχόνων μορφην ή ύλη ης το αμορφον έχει, ωρίν λαβείν την μορφήν έτως αύτη προς έσίαν έχει, κ το τόδε τι, κ' τὸ ου. Phys. 1. î. c. 7. p. 20. Edit. Sylb. -The Subject-Nature, (that is, the PRIMARY MATTER) is knowable in the way of ANALOGY: for as is the Brass to the Statue; the Timber to the Bed; or the immediate and formless Material to any of those things which have Form, before it assumes that Form; so is THIS [general and primary] MATTER to SUBSTANCE, and to each particular Thing, and to each particular Being.

Not that Aristotle rejected the Argument from AB-STRACTION.—Λέγω δ' υλην ή καθ' αυτην μήτε τὶς μήτε ωοσον, μήτε άλλο μηθεν λέγελαι οίς ώρις αι το ον. έςι γάρ τι, καθ' ἕ καθηγορεῖται τέτων έκαςου, ῷ τὸ εἶναι έτερου, κή των καληγοριών έκάςη-I mean by MAT-TER, that which of itself is not denominated either this particular Substance, or that particular Quantity, or any other of those Attributes, by which Being is characterised. And here, if a Digression may be per-Ch.IV. mitted, let us reslect for a moment on the character of old Proteus.

Omnia

It is indeed that, of which each one of these is predicated, and which has an Essence different from every one of the Predicaments. Metaph. z. p. 106. Edit. Sylb.

And here we may observe, that as ABSTRACTION and ANALOGY are the two Methods, by which this firange Being (as it has been called) was investigated by the ancient Philosophers, so for that reason Timæus tells us, that it was made known to us λοδισμῷ νόθω, by a spurious kind of Reasoning, p. 545.—Plato says the same, only he is more full.—Matter, according to him, was μετ' ἀναισθησίας ἀπτὸν, λογισμῷ τινὶ νόθω μόγις ωισόν—Something tangible without Sensation, something hard to be believed, and that by means of a spurious kind of reasoning. Tim. Plat. p. 52. Edit. Serr.

This spurious Reasoning is explained by Timæus, who fays that MATTER is so comprehended τῷ μήκω κατ εἰθυωρίαν νοεῖσθαι, by it's not being understood in a direct way, but only obliquely, and by implication. Opusc. Myth. Gale, p. 545.

As to the being tangible without Sensation, this means, that though it be an effential to Body, which appears to make it tangible, yet the Abstraction makes it stand under the same character to the Touch, as Darkness stands to the Sight, Silence to the Hearing; we cannot be said to see the one, nor to hear the other; and yet without the help of those two Senses we could have no

Compre-

Ch.IV. Omnia transformat sesse in miracula rerum,
Ignemque, horribilemque feram, sluviumque liquentem. Georg. IV.

Thus VIRGIL — thus, before him, Homer:

Πάντα δε γιγνόμενος ωειρήσεται, όσο επι γαΐαν Ερπετα γίνονλαι, κ ύδως, κ θεσπιδαες ωῦς.

Odur. A. 417.

Made into all things, all he'll try; become Each living thing, that creeps on earth; will glide

A liquid Stream, or blaze a flaming Fire (k).

Comprehension of these two Negations, or perhaps more properly, those two sensible Privations.

Both Timæus and Plato drop expressions, as if they considered MATTER to be PLACE. Timæus calls it τύπ το and χώρα; Plato calls it χώρα and εδρα. Opusc. Myth. p. 544. Plat. Tim. p. 52.

Chalcidius elegantly shews, how in this negative manner it attends all the Predicaments, and serves for a support to each. Essentia est, ut opinor, cum eam Species, &c. See Com. in Tim. p. 438.

(k) To the Poets here quoted may be added Horace Sat. lib. ii. S. 3. v. 73. Ovid. Metam. viii. 730.

WHAT wonder, if this fingular Deity Ch.IV. suggest to us that singular Being, which we have been just attempting to describe? The Allegory was too obvious to escape the Writers of any age, and there are many, we find, by whom it has been adopted (1).

That great Parent of Mythology as well as Poetry, Homer, not only informs us concerning PROTEUS, but concerning his daughter EIDOTHEA, who discovered her father's abode.

We shall perceive in the Explanations which follow, how this Fable applies itself to the Subject of the present Chapter.

(1) Some, fays Eustathius, when he comments the paffage above cited from Homer, hold "PROTEUS to 66 be that original MATTER, which is the Receptacle of

" Forms; that, which being IN ACTUALITY NO ONE

" of thele Forms, is yet IN CAPACITY all of them-" WHICH PROTEUS (they add) EIDOTHEA his

66 Daughter is elegantly said to discover, by leading him

" forth out of Capacity into Actuality; that is, she is that

" PRINCIPLE OF MOTION, which contrives to make " him RUSH INTO FORM, and be moved and actuated.

Heraclides Ponticus having adopted the same Method of explaining, subjoins-" that hence it was with 66 good reason, that the FORMLESS MATTER was called

s. PROTEUS; and that PROVIDENCE, which modified

Ch.IV.

" each Being with it's peculiar Form and Character, was called EIDOTHEA."

Τhe words of Eustathius in the original are—
ΠΡΩΤΕΑ τὴν ωρωτόγονου εἶναι ὕλην, τὴν τῶν εἰδῶν
δεχάδα, τὴν ἐνερΓεία μὲν ἔσαν μηδὲν τῶν εἰδῶν, δυνάμει
δὲ τὰ ωάνῖα— ὁν δὴ Πρωτέα καλῶς λέγεἰαι ἡ ΕΙΔΟΘΕΑ ἐκφαίνειν, διὰ τῆς ἐκ τε δυνάμει εἰς τὴν ἐνέργειαν ωροαΓωγῆς ἡγεν ἡ κίνησις, ἡ ΕΙΣ ΕΙΔΟΣ
ΘΕΕΙΝ αὐτὸν, ἢ κινεῖσθας μηχανωμένη. Euftath. in
Hom. Odyff. p. 177. Edit. Bafil.

We shall only remark, as we proceed, that the Etymology here given of EIDOTHEA, eis eid Schu, to rush into Form, is invented, like many other ancient Etymologies, more to explain the word philosophically, than to give us it's real origin. 'Tis perhaps more profitable, though not equally critical, to etymologize after this manner; and such appears to have been the common practice of Plato, Aristotle, and the Stoics.

The words of Heraclides are—ωςε ευλοίου, την μέν ἄμορφον ύλην ΠΡΩΤΕΑ καλείσθαι, την δ' είδωλοπλαςήσασαν Έκαςα Πρόνοιαν ΕΙΔΟΘΕΑΝ. Heraclid. Pontic. p. 490. Gale's Opusc. Mythog. 8vo.

To these Greeks may be subjoined a respectable Countryman of our own.

Lord Verulam tells us of PROTEUS, that he had his Herd of Seals, or Sea-calves; that these twas his Castom every day to tell over, and then to retire into a Cavern, and repose himself. Of this we read the following Explanation—" that under the Person of PROTEUS" is signified MATTER, the most ancient of all Things,

Ch.IV.

** next to the Deity—that the Herd of Proteus was nothing elfe, than the ordinary Species of Animals,
Plants, and Metals, into which MATTER appears to
diffuse, and as it were to consume itself; so that after
it has formed and finished those several Species (it's task
being in a manner complete) it appears to sleep and be
at rest, nor to labour at, attempt, or prepare any Species farther." De Sapientia Vet. C. 13.

The Author's own words are—fub Protes enim persond Materia significatur, omnium rerum post Deum antiquissima.—Pecus autem, sive Grex Protei non aliud videtur esse, quam Species ordinariæ Animalium, Plantarum, Metallorum, in quibus Materia videtur se dissundere, et quasi consumere; adeo ut, postquam istas Species essenti, et absolverit, (tanquam penso completo) dormire et quiescere videatur, nec alias amplius Species moliri, tentare, aut parare.

CHAP. V.

Concerning FORM—An imperfect Description of it-Primary Forms, united with Matter, make Body-Body Mathematical-Body Physical-how they differ-Essential Forms—Transition to Forms of a Character superior to the passive and elementary.

Ch. V. PORM is that elementary Constituent in every composite Substance, by which it is DISTINGUISHED and CHARACTER-IZED, and known from every other (a). But to be more explicit.

> THE first and most simple of all Extensions is a Line. This, when it exists united with a fecond Extension, makes a Superficies; and these two, existing to-

⁽a) See the first Note in the preceding Chapter, and page 91.

gether with a third, make a Solid. Now Ch. V. this last and complete EXTENSION we call the first and simplest Form; and when this first and simplest Form accedes to the first and simplest Matter, the Union of the two produces Body, which is for that reason defined to be Matter triply extended. And thus we behold the rise of pure and original Body (b).

Іт

(b) Original Body, when we look downwards, has reference to the primary Matter, it's Substratum; when we look upwards, becomes itself a υλη, or Matter to other things; to the Elements as commonly called, Air, Earth, Water, &c. and in consequence, to all the variety of natural Productions.

Hence it is, that Ammonius, speaking of the first Matter, says—αυτη εν, εξοίνωθείσα κατα τας τρείς διας άσεις, ωοιεί το δεύτερον άποιον σωμα—Fbis [that is, the first Matter] being embulked with three extensions, makes the second Matter or Subject, that is to say, Body void of Quality.

After having shewn how natural Qualities and Attributes stood in need of such a Subject for their existence, he adds (which is worth remarking)—έχ ὅτι των σοτε ἐνεργεία ἡ τῶν ἀντων γένεσιν Θεωρεντες Φαμὲν, ἀλλὰ τὴν εὐτακτον τῶν ὄντων γένεσιν Θεωρεντες Φαμὲν,

Ch. V.

It must be remembered however, that Body under this character is something indefinite and vague, and scarcely to be made an Object of scientific Contemplation. Tis necessary to this end, that it's Extension should be bounded; for as yet we have treated it without such regard. Now the Bound or Limit of Simple Body is Figure; and thus it is that FIGURE, with regard to Body, becomes the next Form after Extension.

IN Body thus bounded by Figure, every other of it's Attributes being abstracted and withdrawn, we behold that Species of Body, called Body MATHEMATICAL; a name so given it, because the Mathematician, as such, considers no other At-

τη επινοία διαιρώντες ταῦτα, τὰ τη Φύσει ἀχώριςα—
not that there ever was IN ACTUALITY either Matter
without Body, or Body without Quality; but we say so,
as we contemplate the well ordered Generation of things,
dividing those things in Imagination, which are by Nature
inseparable. Ammon in Præd. p. 62. See below, p.
90, 91.

tributes

tributes of Body, except it be these two Ch. V. Primary, it's Extension and it's Figure (c).

But though the bounding of Body by Figure is one step towards rendering it more definite and knowable, yet is not this sufficient for the purposes of Nature. 'Tis necessary here, that not only it's External should be duly bounded, but that a suitable regard should be likewise had to it's Internal. This internal Adjustment, Disposition, or Arrangement

⁽c) In Body Mathematical all Qualities being abftracted but Figure and Extension, we may hence perceive the reason why the Contemplation of such Body (which Contemplation makes so large a part of the Mathematical Sciences) is more accurate and certain, than that of any other Body. It is, because of all Bodies, Mathematical Body has the fewest, the most obvious, and the most precise Attributes.

Hence too we may perceive the difference between a Mathematician, and a natural Philosopher. They differ, as their Subjects differ; as the Subject of the first is simple; of the last is complicated; as the Attributes of Mathematical Body are few and known; of Physical Body are unknown and infinite. Vid. Arist. Phys. 1. ii. c. 2.

Ch. V. (denominate it as you please) is called ORGANIZATION, and may be considered as the third Form, which appertains to Body. By it's accession we behold the rise of Body Physical or Natural, for every such Body is some way or other organized.

And thus may we affirm that these three, that is to fay, Extension, Fi-GURE, and ORGANIZATION, are the three ORIGINAL FORMS to BODY PHY-SICAL OF NATURAL, Figure having respect to it's External; Organization to it's Internal; and Extension being common both to one and to the other. 'Tis more than probable that from the Variation in these universal, and, as I may fay, Primary Forms, arise most of those fecondary Forms usually called QUALI-TIES SENSIBLE, because they are the proper Objects of our several Sensations. Such are Roughness and Smoothness, Hardness and Softness, the tribes of Co-

lours,

lours, Savours and Odours, not to men- Ch. V. tion those Powers of Character more subtle, the Powers Electric, Magnetic, Medicinal, &c.

HERE therefore we may answer the Question, how natural Bodies are distinguished. Not a fingle one among them confifts of Materials in Chaos, but of Materials wrought up after the most exquisite manner, and that conspicuous in their Organization (d), or in their Figure, or in both.

As therefore every natural Body is diftinguished by the Differences just described; and as these Differences have nothing to do with the original Matter, which being every where fimilar, can afford no distinctions at all: may we not

⁽d) No where perhaps is the force of Organiza. tion more conspicuous, than when we perceive different Grafts, upon the fame Tree, to produce different Species of Fruit.

Ch. V. hence infer the expediency of EssenTIAL FORMS, that every natural Subflance may be effentially characterized? 'Tis
with deference to my Contemporaries,
that I furmife this affertion. I speak
perhaps of Spectres, as shocking to some
Philosophers, as those were to Eneas,
which he met in his way to Hell:

Terribiles visu Formæ.

Yet we hope to make our peace, by declaring it our opinion, that we by no means think these Forms Self-existent; things, which Matter may slip off, and fairly leave to themselves,

Ut veteres ponunt tunicas æstate cicadæ (e.)

They rather mean fomething, which, though differing from Matter, can yet never fubfift without it (f); fomething,

⁽e) Lucr. iv. 56.

⁽f) See Note the fecond of this Chapter. 'Tis a uniform Polition in the Physics of the old Peripatetics,

which, united with it, helps to produce Ch. V. every composite Being, that is to say in other words, every natural Substance in the visible world.

IT must be remembered however (as we have said before) that it is the Form in this Union, which is the Source of all Distinction *. 'Tis by this, that the Ox is distinguished from the Horse, not by that Grass, on which they subsist, the common Matter to both. To which also may be added, that as Figures and sensible Qualities are the only objects of our Sensations, and these all are Parts of natural Form; so therefore (contrary to the

tetics, ὅτι ἀχώριςα τὰ πάθη, that the Affections [of Body] are inseparable from it. See Arist. Phys. 1. i. 'Tis one thing to be a Cube, another thing to be Iron, or Silver, or Wood, or Ivory. The Cube is most evidently and certainly no one of these, yet is it absurd and impossible to suppose the Cube should ever exist without one of these, or something similar to support it. See before, pages 77, 78.

^{*} P. 63. 84.

Ch. V. fentiment of the Vulgar, who dream of nothing but of Matter) 'tis Form which is in truth the whole, that we either hear, fee, or feel; nor is mere Matter any thing better, than an obscure imperfect Being, knowable only to the reasoning Faculty by the two methods already explained, I mean that of Analogy, and that of Abstraction (g).

HERE therefore we conclude with refpect to Sensible Forms, that is to fay, Forms immerged in Matter, and ever inseparable from it. In these and Matter we place the Elements of (h) NATURAL

⁽g) See before p. 76, 77, 78.

⁽b) ELEMENTS are $\tau \alpha$ invarágeoula altra, the inherent, or (if I may use the expression) the in-existing Causes, such as MATTER and FORM, of which we have been treating. There are other Causes, such as the Tribe of Efficient Causes, which cannot be called Elements, because they make no part of the Substances, which they generate, or produce. Thus the Statuary is no part of his Statue; the Painter, of his Picture.

first part of the Inquiry we proposed.

WE are now to engage in Speculations of another kind, and from the *Elements* of Natural Substance to inquire after it's **Efficient Cause** (i), that is to fay, that

Picture. Hence it appears that ALL ELEMENTS are Causes; but not ALL CAUSES, Elements.

(i) Aristotle having reduced his three Principles of natural Productions to two, which two we have treated in this, and the preceding Chapter, adheres not fo frictly to this Reduction, but that he still admits the Three.—Thus in his Metaphysics, he tells us - 676 άρχαι είσι τρείς, το είδω, κλ ή σέρησις κλ ή ύληthat the Form, the Privation, and the Matter, are three PRINCIPLES. He calls them ELEMENTS, because they have no Existence, but in the Substance to which they belong. To these he adds the Efficient Cause, which as it exists externally, that is, without the Subject, he will not for that reason allow to be an Element.—Hence he observes, ώσε Στοιχεία μεν τρία, αιτίαι δε κ, άρχαὶ τέσσαρες - that the ELEMENTS were THREE; the CAUSES and PRINCIPLES were FOUR. His instances are-Health, the Form; Disease, the Privation; the human Body, the Subject. In these three Causes we have the ELEMENTS: Add to these Causes the fourth, Ch. V. that Cause, which associates those Elements, and which employs them, when associated, according to their various and peculiar Characters.

that is, the Efficient, the Art of Medicine; and then we have THE FOUR CAUSES required.—Again—call the Plan of the House, the Form; the previous want of Order, the Privation; the Bricks, the Materials; add to these the fourth Cause, the Architect's Art, and again we have THE FOUR CAUSES required. Metaph. A. p. 198, 199. Edit. Sylb.

'Tis this Efficient Cause, that will make the Subject of the following Chapter.

C H A P. VI.

Concerning FORM, considered as an EFFICIENT ANIMATING PRINCIPLE—
Harmony in Nature between the living
and the lifeless—Ovid, a philosophical
Poet—Farther Description of the animating Principle from it's Operations,
Energies, and Effects—Virgil—The Active and the Passive Principle run thro'
the Universe—Mind, Region of Forms
—Corporeal Connections, where necessary, where obstructive—Means and
Ends—their different Precedence according to different Systems—Empedocles,
Lucretius, Prior, Galen, Cicero, Aristotle, &c.—Providence.

ET us suppose an artificial Sub-Ch.VI. stance, for example a musical Pipe, and let us suppose to this Pipe the Art of the Piper to be united, not separated

Ch.VI.

as now, but vitally united, fo that the Pipe by it's own Election might play, whenever it pleased.—Would not this Union render it a kind of living Being, where the Art would be an active Principle, the Pipe a passive, both reciprocally fitted for the purposes of each other? -And what, if instead of the Piper's Art, we were to substitute that of the Harper?—Would this new Union also be natural like the former? Or would not rather the Inaptitude of the Constituents prevent any Union at all? It certainly would prevent it, and all Melody confequent; fo that we could now by no analogy confider the Pipe as animated.

'Tis in these and other Arts, considered as efficient Habits, we gain a glimpse of those Forms, which characterise not by visible Qualities, but by their respective Powers, their Operations and their Energies. As is the Piper's Art to the Pipe, the Harper's to the Harp,

Leonine, the Soul of Man to the Body
Human; because in neither case 'tis possible to commute or make an exchange,
without subverting the very End and
Constitution of the Animal (a).

And thus are we arrived at a new order of Forms, the tribe of animating Principles (b); for there is nothing which distin-

⁽a) See Arist. de An. 1. i. c. 3. p. 13. Edit. Sylb.

The Stagirite uses upon this occasion the following Similitude— παραπλήσιου γαρ λέγεσιν, ωσπερ εί τις Φαίη την τεκλονικην είς αὐλες ἐνδύεσθαι δεῖ γαρ την μεν τεκνονν κρησθαι τοῖς ὀργάνοις, την δε ψυκήν τῶ σώματι— They [who adopt the Notion of placing any Soul in any Body] talk the same, as if a Person was to say the Carpenter's Art might enter into a Musician's Pipe: now 'tis necessary that every Art should use it's proper Instruments, and every Soul it's proper Body.

⁽b) Alexander Aphrodistensis has an express Differtation to prove, ὅτι εἶδιων ἡ ψυχὴ, that the Soul is a Form. Alex. p. 124. B. Edit. Ald. Ven. 1534. It was so called, not with the least view to it's having a Figure,

Ch.VI. distinguishes so eminently as these; and 'tis on the power of Distinction, that we rest the very Essence of Form.

'Tis here we view Form in a higher and nobler light, than in that of a paffive elementary Constituent, a mere inactive and sensible Attribute. 'Tis here it assumes the dignity of a living motive Power, of a Power destined by it's nature to use, and not be used. 'Tis to the Diversity of Powers in these animating Forms, that the Diversity of the Organizations in the corporeal World has reference. That strong and nervous Leg, so well armed with tearing

Figure, as if, for example, it were a Spherical Body, but because it was able not only by it's perceptive Powers to secrete Forms, but by it's productive Powers to impart them; whence, being considered as full of them, it was elegantly described to be $\tau \circ \pi \odot \to \text{Eldow}$, the Region of Forms. Arish. de Anim. 1. iii. c. 4.—See also 1. ii. c. 1.

See Hermes, p. 310, 311, 312, &c.

Fangs, how perfectly is it correspondent Ch.VI. to the fierce Instincts of the Lion? Had it been adorned, like the Human Arm, with Fingers instead of Fangs, the natural Energies of a Lion had been all of them defeated. That more delicate structure of an Arm, terminating in Fingers fo nicely diversified, how perfectly does it correspond to the pregnant Invention of the human Soul? Had these Fingers been Fangs, what had become of poor Art, that by her Operations procures us fo many Elegancies and Utilities? 'Tis here we behold the Harmony between the Visible World and the Invifible: between the Passive and the Active: between the Lifeless and the Living. The whole Variety in Bodies as well natural as artificial, is folely referable to the previous Variety in these their animating Forms. 'Tis for the fake of these they exist; 'tis by these they are employed; and without them they would

Ch.VI. be as useless, as the Shoe without the Foot.

'Twas perhaps owing to this use of the word Form, in order to denote an animating Principle, that the Poet Ovid (who appears by his works not unacquainted with Philosophy) opens his Metamorphosis with those lines, so perplexing to his Commentators.

In NOVA fert Animus mutatas dicere Formas

CORPORA

"FORMS changed into NEW BODIES;" not of Bodies changed into new Forms, but of Forms, that is to fay, Souls, transferred into NEW BODIES. The Bodies it feems were new, but the Souls or Forms remained the fame, of which throughout his Work we have perpetual testimony. Thus, when he speaks of Callisto,

Mens antiqua tamen factà quoque mansit in ursà. Metam. ii. 485.

Ch. IV.

Of Arachne,

ANTIQUAS exercet Aranea TELAS.

Ibid. vi. 145.

Of the Ants, that became Men,

Nunc quoque habent; parcumque genus, patiensque laborum. Ibid. vii. 656.

And so in many other places (c), which those who favour this Conjecture, may easily discover.

⁽c) Ovid appears by these quotations to have used the word Forma, when he opens his Poem, in a sense truly Philosophical. His Doctrine, that this Form or Soul might be transferred from one Body into another was Pythagorean, but which the Peripatetics rejected from the reasons above alleged, in the first Note of this Chapter.

Ch.VI.

As nothing can become known by that, which it has not, fo it would be abfurd to attempt describing these animating Forms by any vifible or other Qualities, the proper Objects of our Sensations. The Sculptor's Art is not Figure, but 'tis that, through which Figure is imparted to something else. The Harper's Art is not Sound, but 'tis that, through which Sounds are called forth from fomething else. They are of themselves no objects either of the Ear or of the Eye; but their nature or character is understood in this. that were they never to exert their proper Energies on their proper Subjects, the Marble would remain for ever shapeless, the Harp would remain for ever filent (d).

Tis

⁽d) See Maximus Tyrius, Diff. I. who eloquently applies this Reasoning to the Supreme Being, the Divine Artist of the Universe—Εί δὲ κὰ νῦν ἄδη μαθείν ἐρᾶς την ἐκείνε Φύσιν, τῶς τίς αὐτην διηγήσηται; καλὸν μὲν γὰς εἶναι τὸν Θεὸν, κὰ τῶν καλῶν τὸ Φανώ-

'Tis the fame in natural Beings (e). Ch.VI. The ANIMATING FORM of a natural Body is neither it's Organization, nor it's Figure, nor any other of those inferior Forms, which make up the System of

τατον άλλ' ε σωμα καλου, άλλ' όθεν κι τω σώματι ἐπιρρεῖ τὸ κάλλω. ἐδὲ λειμῶν καλὸς, ἀλλ' ὅθεν κὸ το λειμών καλός η σοίαμε κάλλω, η θαλάτίης, η έρανε, κ' των έν έρανω θεων, ωαν το κάλλ τέτο έκείθεν ρεί, οίου εκ σηγής αενυάς, κ ακηράτς καθόσον αύτε μετέχεν έκαςα, καλά, κ έδραῖα, κ σωζόμενα κ καθόσον αὐτε ἀπολείπεται, αίχρα, κ διαλυόμενα, κ) Φειρόμενα. — But if even now you wish to learn the nature of this Sovereign Being, after what manner shall any one be able to explain it? DIVINITY itself is furely beauteous, and of all Beauties, &c. &c.

Those, who chuse to see the remaining part of this elegant original, elegantly translated, may find it in the second Volume of Lord Shaftesbury's Characteristics, p. 295.

(e) Here an attempt is made to explain the three great Principles of the Soul, anciently called to vontinov, το αίσθητικον, το Βρεπλικόν, the Intellective, the Sensitive, and the Nutritive. The Nutritive is treated first, then the Sensitive, then the Intellective.

See below, note on the word Intellective, p. 106.

Ch. VI. it's visible Qualities; but 'tis the Power, which, not being that Organization, nor that Figure, nor those Qualities, is yet able to produce, to preserve, and to employ them. 'Tis therefore the Power, which first moves, and then conducts that latent Process, by which the Acorn becomes an Oak, the Embryo becomes a Man. 'Tis the Power, by which the Aliment of Plants and Animals is digested, and by such digestion transformed into a part of themselves. 'Tis the Power, as oft as the Body is either mutilated or fick, that co-operates with the Medicine in effecting the Cure. 'Tis the Power, which departing, the Body ceases to live, and the Members foon pass into putrefaction and decay.

> FARTHER still, as putrefaction and decay will necessarily come, and Nature would be at an end, were she not maintained by a supply; it is therefore the Power, that enables every Being to pro

duce another like itself, the Lion to produce a Lion, the Oak to produce an Oak; so that, while Individuals perish, the Species still remains, and THE Cor-RUPTIBLE, as far as may be, PARTAKES OF THE ETERNAL AND DIVINE (f).

IN

(f) This ETERNAL and DIVINE is what, as Arifotle fays, all Beings desire, and for the sake of which they act whatever they act agreeably to Nature. Πάντα γαρ ἐκείνε (scil. τε ἀεὶ κ) τε θείε) ὀρέγελαι, κακείνε ένεκα ωράτιει ὅσα κατὰ Φύσιν ωράτιει. De Anim. l. ii. c. 4. p. 28. Edit. Sylb.

Immediately afterwards he subjoins the following remarkable passage, by which he appears to refer the whole System of natural Production or Generation to that one great Principle.—ἐπεὶ ἔν κοινωνεῖν ἀδυνατεῖ τῶ ἀεὶ κὰ τῶ Θείκ τῆ συνεχεία, διὰ τὸ μηδὲν ἐνδέχεσθαι τῶν Φθαρτῶν τὸ αὐτὸ κὰ ἐν ἀριθμῶ διαμένειν, ῆ μετέχειν δύναται ἔκαςον, ταύτη κοινωνεῖ, τὸ μὲν μᾶλλον, τὸ δὲ ῆτὶον κὰ διαμένει ἐκ αὐτὸ, ἀλλ' οῖον αὐτὸ ἀριθμῷ μὲν ἐχ ἐν, εἰδει δὲ ἐν.—In as much therefore as these Beings (meaning the subordinate and inferior) cannot participate of the Eternal and the Divine in uninterrupted Continuity, from it's being impossible that any thing perishable and transient should remain the same and one numerically; hence it follows that as far as each is capable of sharing it, so far it participates, one thing

Ch.VI.

In all the Energies here enumerated it extends through Vegetables as well as Animals. But with Animals, taken apart, it is that higher Active Faculty, which, by employing the Organs of Sense, peculiar to them as Animals, distinguishes them as Beings sensitive from Vegetables and Plants. Farther than this, with Man alone above the rest it is that still superior and more noble FACULTY, which by it's own divine Vigour, unassisted perhaps with Organs, makes and denominates him a Being Intellective and Rational (g).

AND

in a greater degree, and another in a less; and that each thing remains not precisely the same, but as it were the same, not numerically one, but one in Species.

To this Virgil alludes,

At GENUS IMMORTALE manes

Georg. iv.

See Plat. Conviv. p. 1197. C. Ed. Fic.

(g) Των δε δυνάμεων της ψυχης αι λεχθείσαι τοις μεν ενυπάρχεσι ωασαι, καθάπες είπομεν, τοις δε τι-

AND so much for the description of Ch.VI, those Forms, which, being purely invi-

vès autaw, èviois de mia movn.—As to the Powers of the Soul here described, they exist all of them in some Beings; some of them only in other Beings; and in some Beings only one of them. Arist. de An. l. ii. c. 3. p. 26. Edit. Sylb. That is to say, Man possesses all; Brutes possesses, the Sensitive, and the Intellective Faculty; Brutes only the Vegetative and the Sensitive; Plants, the Vegetative alone.

See foon after, p. 28-åveu μ èv γ à ρ τ ë $\Im \rho$ e τ linë u. τ . λ .

Ideoque ob consortium corporis est inter homines, bestiosque, et cetæra vità carentia, Societas communioque corporeorum proventuum. Siquidem NASCI, NUTRIRI, CRESCERE commune est hominibus cum cæteris; SEN-TIRE vero ET APPETERE, commune demum hominibus et mutis tantum, et ratione carentibus animalibus. Cu-PIDITAS porro atque IRACUNDIA vel agrestium vel mansuetorum, APPETITUS IRRATIONABILIS est: Hominis vero, cujus est proprium rationi mentem applicare, RATIONABILIS: RATIOCINANDI enim atque IN-TELLIGENDI, SCIENDIQUE VERUM APPETITUS proprius est Hominis, quia a cupiditate atque iracundia plurimum distat. Illa quippe etiam in mutis animalibus, et multo quidem acriora, cernuntur: RATIONIS autem PERFECTIO et INTELLECTUS, propria DEI et Ho-MINIS tantum. Chalcid. in Plat. Tim. p. 345. Edit. Fabric.

Ch.VI. fible, and (it may be faid) totally insenfible, are no otherwise to be known, Consciousness alone excepted, than by sensible Operations and Energies (h), perceived in things corporeal.

(h) See the Passage just before quoted from Maximus Tyrius. Nothing can be of greater importance, than a due attention to this Distinction; I mean the Distinction between Effects and Causes; between Effects which are visible, and Causes which are invisible; between Effects, the natural Objects of all our Sensations; and Causes, which are Objects of no Sensation at all.

'Tis with reference to this Distinction that Cyrus is made to reason in his last moments by Xenophon, his philosophical Historian, who thus describes him addressing his Children.

Οὐ γὰρ δήπε τετό γε σαφῶς δοκεῖτε εἰδεναι, ὡς ἐδὲν ἔσομαι ἐγω ἔτι, ἐπειδαν τε ἀνθρωπίνε βίε τελευτήσω·
ἐδὲ γὰρ νῦν τοι τήν γ' ἐμὴν ψυχὴν ἐωρᾶτε, ἀλλ' οῖς
διεπράτθετο, τέτοις αὐτὴν ὡς ἔσαν κατεθωρᾶτε—
Thus excellently translated by my honourable Relation, Mr. Afhley.—You ought not to imagine you certainly know, that, after I have closed the period of Human Life, I shall no longer exist. For neither do you
NOW see my Soul; but you conclude FROM IT'S OPERATIONS, that it DOES EXIST. Cyropædia, l. viii.

Cicero has translated the same passage with great elegance, but in a manner less strict, less confined to the original.

As in their very Essence they imply Ch.VI.

Activity, as much as Matter, upon which they operate, implies Passivity; hence in every natural Composite, we may discern the influence of two such Principles, while, under different Proportions, and in different Degrees, The Active enlivens the Passive, and The Passive depresses the Active.

'Tis to this that VIRGIL nobly alludes, when he tells us, that to every enlivened fubstance, every animated Being, there was something appertaining of etherial

Nolite arbitrari O! mihi carissimi filii, me, cum a vobis discessero, nusquam aut nullum fere; nec enim, dum eram vobiscum, animum meum videbatis, sed cum esset in hoc corpore, EX IIS REBUS, QUAS GEREBAM, intelligebatis: eundem igitur esse creditote, etiamsi nullum videbitis. De Senest. c. 22.

Nothing is more certain than that many things, which have no fenfible Qualities, may be described accurately, and comprehended adequately, by their Energies and Operations upon sensible Objects.

Ch.VI. Vigour, and heavenly Origin, as far forth as not retarded by it's mortal and earthly Members.

IGNEUS est ollis VIGOR, et CÆLESTIS

Seminibus, quantum nox NOXIA CORPORA
TARDANT,

TERRENIQUE hebetant ARTUS, moribundaque membra. Æn. VI.

Could we penetrate that Mist, which hides so much from human Eyes, and sollow these Composites to their different and original Principles, we might gain perhaps a glimpse of two objects worth contemplating; of that which is First, and that which is Last, in the general Order of Being; of pure Energy in the Supreme Mind, the first Mover of all Efficients; of pure Passivity in the lowest Matter, the ultimate Basis of all subjects (i).

 ⁽i) Thus the Stoics—δοκεῖ δ' αὐτοῖς ἀρχὰς εἶνὰι
 τῶν ὅλων δύο, τὸ ϖοιᾶν κὰ τὸ ϖάχον. τὸ μὲν ἔν ϖά-

BUT left these should be esteemed Ch.VI. Speculations rather foreign, 'tis sufficient

to

οχου είναι την άποιον εσίαν, την ύλην, το δε ωσιέν, του έν αὐτη λόγου, του θεόυ. - Their opinion is, that the Principles of all things are two, THE ACTIVE Principle and THE PASSIVE; that the Passive Principle is that Substance void of all Quality, MATTER; the Active Principle, that Reason, which exists within it, GoD. Diog. Laert. vii. 134.

The following Paffage from Ammonius is remarkable, and well applies to the present Subject.-Διο Φασὶ τὴν ὅλην τῷ Θείω ἀνομοίως ώμοιῶσθαι ώμοιώσθαι μέν, ότι δι' αποΦάσεως των άλλων σημαίνεται έκατερον, ανομοίως δε, ότι τε μεν, κρείτου 🕒 όντ , η κατα ωάντα τα όντα, αποΦάσκομεν ωάντα, της δε ύλης, χείρου 🕒 έσης η κατά σάντα, ταῦτα άποφάσκομεν. - For this reason they say that MATTER is DISSIMILARLY SIMILAR to the DIVINITY; is SIMI-LAR, because each of them is explained by a Negation of all other things; DISSIMILARLY so, in as much as we deny all things of the Divinity, by it's being better than all things; we deny them of Matter, by it's being worse, Ammon. in Prædic. p. 50. B.

Archytas thus expresses himself in his Doric Dialect.

Το μεν έντι ωσιέου, το δε ωάγου οίου έν τοίς Φυσικοίς ωριέρν μεν ο θεός, σάχον δε ά ύλα, κ ωριέρν Ch.VI. to mark the Analogy between things Na=
tural and Artificial; how, that as there
are no Forms of Art, which did not
pre-exist in the Mind of Man, so are
there no Forms of Nature, which did
not pre-exist in the Mind of God. 'Tis
through this we comprehend, how MIND
or Intellect is the Region of

κό χον, τὰ ςοιχεῖα.—There is something, which is AGENT; and something, which is PATIENT; thus among natural Beings GOD is the AGENT; MATTER the PATIENT; but the ELEMENTS are both Agent and Patient united.

Upon this Simplicius observes—Σαφες δὲ ὅντῷ τε λεγομένε, παςαδείγματα ἀρχηδικώτατα παρέθετος ποιείν μὲν τὸν Θεὸν εἰπων, ῷ κὰ τὰ ἄλλα τὰ ποιηδικὰ αἴτια συνέπεται, πάχειν δὲ τὴν υλην, δι ἦν κὰ τὰ ἄλλα μετέχει τε πάχειν, κὰ ποιείν δὲ κὰ πάχειν τὰ εισκε.—
Τρο what has been said is evident, he has adduced (to explain himself) the two highest and most leading Instances, saying, that God is Agent, whom all other Active Causes follow; and Matter Patient, thro which other Beings partake of Passion; and that the Elements are both Agents and Patients, in as much as they participate both of Matter and of Form. Simpl. in Præd. p. 84. Edit. Basil. 1551.

FORMS (k), in a far more noble and exalted sense, than by being their passive
Receptacle through Impressions from
Objects without. It is their Region, not
by being the Spot into which they migrate as strangers, but in which they
dwell as autoxboves, the original Natives
of the Country. Tis in Mind they
first exist, before Matter can receive

⁽k) See Aristotle already quoted, p. 98, in his Tract De Anima iii. 4. p. 57. Edit. Sylb. In the eighth Chapter of the fame Book, p. 62, he calls the Soul EIAOX EIAON, THE FORM OF FORMS, and that not only from it's being that supreme characterifing Power, which gives to subordinate Beings their peculiar Form or Character, but as it uses them, when made, agreeably to their respective Natures. this last acceptation it is the Form of Forms, as the Hand appears to be the Organ of Organs; to be that fuperior Instrument, which uses the rest, the Chissel, the Pencil, the Lyre, &c. all which inferior Organs or Instruments, without this previous and superior one to employ them, would be inefficacious, and dead, and incapable of producing any fingle Effect .- i fuxi ώσπες ή χείς έςι η γας ή χείς δργανόν έςιν δργάνων. Arist. in los.

Ch.VI.

them (1); 'tis from Mind, when they adorn Matter, that they primarily proceed: so that, whether we contemplate the works of Art, or the more excellent Works of Nature, all that we look at, as beautiful, or listen to, as harmonious, is the genuine Effluence or EMANATION OF MIND (m).

AND

⁽¹⁾ In the Scriptural account of Creation, Light, previously to it's existence, is commanded to exist.—
And God Said, LET THERE BE LIGHT, AND THERE WAS LIGHT. So also Vegetables and Animals, previously to their existing, are commanded to exist. Now, whether by these Commands we suppose certain verbal Orders, or (what seems far more probable) only a Divine Volition, respect must needs have been had to certain PRE-EXISTING FORMS, else such Words or such Volitions must have been devoid of all Meaning.

⁽m) A proof, that these transcendent Objects are of an Origin truly mental, is, that nothing but MIND or INTELLECT can recognize or comprehend them. And hence it follows that, if this intellective Faculty be wanting, as it is to inserior Animals, or be unhappily debased, as too often happens to our own Species; tho' their sensitive Organs may be exquisite to a degree, yet are such Beings to such Objects, as if they had no Organs at all. Eyes have they, and see not, &c.

And now to recapitulate what we Ch.VI. have said concerning Form. We have traced it's Variety from the Lifeless and Inanimate up to the Living and Animating; from Figures, Colours, and sensible Qualities, up to the Powers only knowable through their Energies and Operations; in other words, from those Forms, which are but passive Elements, up to those, which are Efficient Causes.

EVEN in these active, animating, and efficient Forms, besides the Differences which we have remarked, there is still another worth regarding. Some of them

And hence the meaning of that fine Trochaic Verse in the Sicilian Poet and Philosopher, Epicharmus;

Νες όρα κὰ νές ἀκέει τ' άλλα κωφα κὰ τυφλά.

^{&#}x27;Tis MIND ALONE, that fees, that hears; all things beside are deaf and blind.

Clem. Alex. t. i. p. 442. Edit. Pott. Max. Tyr. Edit. 8vo. p. 12. Edit. 4to. p. 203.

Ch.VI. cannot act without corporeal Connections, while to others fuch Connections appear to be no way requifite. What for example is the vegetative Power in Plants, without a natural Body for it to nourish and enliven? What the fensitive Powers of hearing or of feeing, without the corporeal Organs of an Ear, or an Eye? These are animating Forms, which though themselves not Body, are yet so far inseparable from it, that were their Connection diffolved, they would be as unable to exert themselves, as the Painter, deprived of his Pencil, or the Harper of his Harp. 'Tis not so with that perceptive Power, UNMIXED AND PURE IN-TELLIGENCE, the Objects of which being purely intelligible, are all congenial with itself. Corporeal Connections appear for little wanted here, that perhaps 'tis then in it's highest Vigour, when it is wholly separated and detached. 'Tis in this part of our animating Form, that we must look for THE IMMORTAL AND DI-

vine (n); 'tis this indeed is all of it, Ch.VI. that a rational Man would wish to preferve,

(n) O δε Näs εοικεν εχίνεσθαι, εσία τις έσα, κ' ε φθείρεσθαι—ΜΙΝΟ seems to be implanted [into the Body] being a peculiar Substance of itself, and not to be corrupted or to perish (as the Body does). Arist. de An. l. i. c. 4. p. 15—And soon after, when he has told us that the Passions perish with the Body, to which they are inseparably united, he adds—O δε Νες ισως θειότερον τι κ απαθές. But the MIND perhaps is something more divine, and free from Passion, or being acted upon.

In another part of the same Work he distinguishes between the original Capacity of the sensitive Part, and that of the Intellective Part: Sensation (he tells us) is impaired by the Violence of sensible Objects: Excessive Sounds, excessive Light, excessive Smells, prevent us from hearing, from feeing, or from fmelling.-Αλλ' δ Νές, όταν τι νοήση σφόδρα νοητον, έχ ήτλον νοεί τα ὑποδεές ερα, άλλα κ μαλλου το μεν γαρ αίσθητικου έκ άνευ σώμαθο, ο δε Νές χωρισός.-But MIND, when it contemplates any thing clearly and strongly intelligible, does not for that reason LESS comprehend inferior Objects of Intellection, but even MORE; the Cause is, the SENSITIVE Principle exists not WITH-OUT A BODY (it's Organs being all Bodily); but MIND on the contrary is SEPARABLE AND DETACH-ED. Ibid. 1. iii. c. 4.

Ch. VI. ferve, when he would be rather thankful to find his Passions and his Appetites extinct.

AND

Cyrus, in the Speech attributed to him by Xenophon, and quoted before, p. 108, speaks as follows.

Οὐτοι ἔγωῖε, ὧ παῖδες, ἐδὲ τἔτο πώποῖε ἐπείσθην,
ώς ἡ ψυχὴ, ἔω μὲν ἀν ἐν θνητῷ Σώμαὶ ἡ, ζῆ· ὅταν
δὲ τέτε ἀπαλλαγῆ, τέθνηκεν. Ὁςῷ γὰς, ὅτι κὰ τὰ θνητὰ σώμαὶα, ὅσον ἀν ἐν αὐτοῖς χρόνον ἡ ἡ ψυχὴ, ζῶνὶα
παρέχεὶαι. Οὐδέ γε, ὅπως ἄφρων ἔςαι ἡ ψυχὴ, ἐπειδὰν
τἔ ἄφρον، σώμαὶ τὰ δίχα γένηὶαι, ἐδὲ τἔτο πέπεισμαι· ἀλλ' ὅταν ἄκραὶ τὰ καθαρὸς ὁ νᾶς ἐκκριθῆ,
τότε κὰ φρονιμώταὶον εἰκὸς αὐτον εἶναι. Διαλυομένε
δὲ ἀνθρώπε, ὅπλά ἐςιν ἔκαςα ἀπίονὶα πρὸς τὸ ὁμοφύλον, πλῆν τῆς ψυχῆς αὐτη δὲ μόνη ἔτε παρᾶσα ἄτε
ἀπίσσα ὁρᾶται. Ξενοφ. Κύρε Παιδ. Η. p. 655.
Edit. Hutchinfon. 4to. Oxon. 1727.

Thus translated by the abovementioned excellent Translator.

No! Children! I can never be perfuaded, that the Soul lives no longer than it dwells in this mortal Body, and that it dies on Separation. For I fee that the Soul communicates Vigour and Motion to mortal Bodies, during it's continuance in them. Neither can I be perfuaded, that the Soul is divested of Intelligence, on it's Separation from this gross senseles Body; but it is probable, that WHEN THE SOUL IS SEPARATED, it becomes pure and intire.

And thus having traced the various Ch.VI. order of Forms from the lowest and basest

intire, and is then MORE INTELLIGENT. It is evident, that, on Man's dissolution, every part of him returns to what is of the same nature with itself, except the Soul: THAT ALONE IS INVISIBLE, BOTH DURING IT'S PRESENCE HERE, AND AT IT'S DEPARTURE. Cyropæd. p. 326, 327.

Thus translated by Cicero-Mibi quidem nunquam persuaderi potest animos, dum in corporibus essent mortalibus, vivere; cum exissent ex iis, emori: nec vero tum animum esse insipientem, cum ex insipienti corpore evasisset ; fed, cum, OMNI ADMIXTIONE CORPORIS LIBERA-TUS, purus et integer esse cæpisset, tum esse sapientem. Atque etiam, cum hominis natura morte dissolvitur, cæterarum rerum perspicuum est quo quaque discedant; abeunt enim illuc omnia, unde orta funt: Animus Autem SOLUS, NEC CUM ADEST, NEC CUM DISCEDIT, AP-PARET. De Senectute, cap. 22.

These Speculations of Cyrus may more properly be called the Speculations of Xenophon, who derived them without doubt (as he did the rest of his Philofophy) from his great Master, Socrates. They passed also into other Systems of Philosophy, derived from the fame Original; fuch for example as the Philosophy of Aristotle, who was a hearer and a disciple as well of Socrates as of Plato.

Ch.VI. basest up to the highest and best, and considered how, though differing, they all agree in this, that they give to every Being it's peculiar and distinctive Character, we shall here conclude our Speculations concerning FORM, the second Species of Substance, and which appears in

Besides what has been offered in the beginning of this Note, the following Remark and Quotation may perhaps inform us farther in the Sentiments of the Stagirite, and his School.

The Human Intellect was supposed by the Peripatetics to be pure and absolute Capacity; to be no particular thing, till it began to comprehend things; nor to be blended with Body, because, if it were, it would have some Quality of Body adhere to it (such as hot, cold, and the like), which Quality would of course obstruct it's operations. On the contrary they held it to receive it's impressions, ωσπερ εν γραμματείω, ω μηθέν υπάρχει εντελεχεία γεξαμμένον, as impressions are made in a writing Tablet, where nothing as yet is in actuality written. Aristot. de Animâ, lib. iii. c. 4. p. 58. Edit. Sylb.

But this in the way of digression—'Tis only the short Specimen of an ancient Speculation, which gives us reasons, why the human Intellect can have no Innate Ideas.

part to be an Element, in part an Ef- Ch.VI. FICIENT CAUSE (0).

And yet we cannot quit these Speculations, the latter part of them at least, without a few observations on their dignity and importance.

THEIR principal object has been to shew, that in the great intellectual System of the Universe, Means do not lead to Ends, but Ends lead to Means; that it was not the Organization of the Sheep's Body, which produced the gentle instincts of the Sheep; nor that of the Lion's Body, which produced the ferocious Instincts of the Lion (p); but, because in the Divine Oeconomy of the whole, such respective animating and active Principles were wanting, it was

⁽⁰⁾ See the two last Notes of the preceding Chapter.

⁽p) See before, in the beginning of this Chapter, page 99.

Ch.VI. therefore necessary that they should be furnished with such peculiarly organized Bodies, that they might be enabled to act, and to perform their part, agreeably to their respective natures, and their proper business in the World.

THE ancient System of Atheism supposed the Organs to come first * before any thing farther was thought of; which Organs, being all of them formed fortuitously, some of them luckily answered an end, and others answered none; those that answered, for a while subsisted; those that failed, immediately perished.

EMPEDOCLES (which is fomewhat furprising, if we consider some of his better and more rational Doctrines) appears to have favoured this opinion:

τὸ τὰ μόρια τῶν ζώων ἀπὸ τύχης γενέσθαι τὰ πλείζα φησίν. He says, (as Aristotle tells us) that the Limbs of Animals were the

^{*} See Hermes, p. 392.

greater part of them MADE BY CHANCE. Ch.VI Soon after this Aristotle proceeds in explaining this strange System-one per giv άπανλα συνέβη, ώσπερ κάν εί ένεκά τε εγίγνελο, ταῦτα μὲν ἐσώθη, ἀπὸ τῶ αὐτομάτε συςάντα επιτηδείως όσα δε μη έτως, απώλετο κ απόλλυται, καθάπερ Έμπεδοκλής λέγει τα βεγενή κ, ανδρόπρωρα-When therefore these Limbs all co-incided, as if they had been made for the purpose, they were then saved and preferved, having been thus aptly put together by the Operation of CHANCE; but fuch as co-incided not, these were lost, and fill [as fast as they arise] are lost; according to what Empedocles says concerning [those monstrous Productions] the Bull Species with Human Heads. Arift. Physic. 1. ii. c. 4. 8.

LUCRETIUS advances the same Doctrine, which was indeed suitable to his Ideas of the World's production. The Earth, he tells us in his account of Creation, aimed at the time to create Ch.VI. many portentous Beings, some with strange Faces and Members; others deficient, without either Feet or Hands; but the endeavours were fruitless, for Nature could not support, and carry them on to Maturity.

Multaque tum Tellus etiam portenta creare

Conata est, mirâ facie, membrisque coorta; Orba pedum partim, manuum viduata vicissim:

Nequicquam, quoniam Natura absterruit auctum,

Nec potuere cupitum ætatis tangere florem, Nec reperire cibum, &c.

LUCRET. V. 835, &c.

'Tis more expressly in contradiction to the Doctrines inculcated through this whole Tract, that he denies Final Causes; that he holds Eyes were not made for seeing, nor Feet for walking, &c. &c. that he calls such explanations a Ch.VI. preposterous and inverted order, the existence of the Use (according to him) not leading to the production of the Thing, but the CASUAL PRODUCTION of the Thing leading to the existence of the Use.

Lumina ne facias oculorum clara creata,

Prospicere ut possimus, et, ut proferre viai Proceros passus, ideo, &c.

Cætera de genere boc inter quæcunque pretantur,

Omnia perversa PRÆPOSTERA sunt ratione:

Nil adeo quoniam natum'st in Corpore,

Possimus; sed quod natum'st, id procreat Usus.

LUCRET. IV. 822, 30.

An elegant Poet of our own states this doctrine with his usual humour.

Note

Ch.VI.

Note here, Lucretius dares to teach
(As all our Youth may learn from CREECH)
That Eyes were made, but could not view,
Nor Hands embrace, nor Feet purfue;
But HEEDLESS Nature did produce
The Members FIRST, and THEN the use:
What each must act, was yet unknown,
Till all was moved by CHANCE alone.

A Man first builds a Country seat;
Then finds the Walls not fit to eat;
Another plants, and wond'ring sees
Nor Books, nor Medals on his Trees.
Yet Poet and Philosopher
Was He, who durst such whims aver.
Blest, for his Sake, be Human Reason,
Which came at last, tho' late, in season.
PRIOR'S Alma, Canto I.

The Poet had cause to be thankful, that a time came, when Men of Sense opposed Reason to such Sophistry; but the Opposition was not so late, nor so

long in coming, as he imagined. Galen, Ch.VI. many Centuries ago, in his excellent Treatise De Usu Partium; Cicero, in the best and most conclusive part of his Treatise De Natura Deorum; and before them both, as well as before Lucretius, Aristotle, through every part of his Works, and above all in those respecting the History of the Members, and the Progression of Animals, had inculcated with irrefistible strength of Argument the great Doctrine of FINAL CAUSES; which if we allow with regard to ourfelves, but deny to Nature, we totally annihilate through the Universe any DI-VINE OF INTELLIGENT PRINCIPLE. For nothing can be Divine, which is not Intelligent; nor any thing Intelligent, which has not a Meaning; nor any Being have a Meaning, which has no Scope, or Final Cause, to govern and direct it's Energies and Operations.

A PAINTER

Ch.VI.

A PAINTER, painting a hundred Portraits, succeeds in ninety-nine, and sails in one. We may possibly impute the single Failure to Chance; but can we possibly impute to Chance his success in the ninety-nine? How then can we dream of Chance in the Operations of Nature; Operations so much more accurate, tho' withal so much greater; and more numerous, than those of the Painter? Chance is never thought of in that which happens always; nor in that which happens for the most part; but, if any where, in that which happens unexpectedly and rarely (q).

AND

⁽q) See Vol. i. p. 267, 8, 9, where the Doctrine of Chance and Fortune is discussed at large upon the Peripatetic Principles, and where an attempt is made to explain that most subtle and ingenious Argument of the Stagirite, by which he proves that Chance and Fortune are so far from supplanting MIND, or an intelligent Principle, that the Existence of the two former necessarily infers the Existence of the latter.

AND fo much for those Philosophers, Ch.VI. recorded for having hardily denied a Providence.

THERE are others, who, tho' they have not denied one, have yet made Systems, that would do without one; feeming to think concerning the trouble of governing a World, as Queen Dido did of old,

Scilicet is superis labor est; ea cura quietos Sollicitat?—— (r).

A THIRD fort, with more decency, have neither denied a Providence, nor

^{&#}x27;Twas consonant to the Reasoning there held, that Plato, long before, is said to have called FORTUNE σύμπλωμα Φύσεως ἢ προαιρέσεως, a SYMPTOM, or THING CO-INCIDENT either with Nature, or the Human Will. See Suidas in the Word, Είμαρμένη. Plato's Account will be better understood perhaps, by recurring to the Quotation in the former part of this note.

⁽r) Virg. Æn. iv.

Ch.VI, omitted one; yet have feldom recurred to it, but upon pressing occasions, when difficulties arose, which they either happened to find, or had happened to make. They appear to have conducted themselves by Horace's advice;

Nec Deus intersit, nisi dignus vindice nodus (s).

A FOURTH Philosopher remains, and a respectable one he is, who supposes Providential Wisdom never to cease for a single moment, and who says to it with reverence, what Ulysses did to Minerva,

- εδέ σε λήθω - Κινύμεν- (t)

⁽s) Hor. Art. Poet.

⁽t) Hom. Iliad. 10. v. 279. See Arrian's EpiEletus, lib. i. c. 12, both in the Original, and in Mrs. Carter's excellent Translation. See also the Comment of my worthy and learned Friend Upton, on this Chapter, in his valuable Edition of that Author, tom. ii. p. 40, 41. See also Psalm exxxix.

—Nor can I move, and 'scape
Thy Notice—

Ch.VI.

But to quit Philosophers and Poets, and return from a Digression, to which we have been led insensibly by the latent connection of many different ideas.

THERE remains nothing further, in the treating of Substance, than to say something of those characters, which are usually ascribed to it by Aristotle and his followers, when they consider it not in a physical, but in a logical view.

C H A P. VII.

Concerning the Properties of Substance, attributed to it in the Peripatetic Logic.

C.VII. HE ancient Logicians, or rather ARISTOTLE and his School, have given us of Substance the following Characters.

They inform us that, as SUBSTANCE, it is not susceptible of more and less (a). Thus a Lion is not more or less a Lion, by being more or less bulky; a Triangle is not more or less a Triangle, by being more or less acute-angled. The Intensions and Remissions are to be found in their Accidents; the Essences remain simply and immutably the same, and either absolutely are, or absolutely are not.

⁽a) Δομεί δὲ ἡ ἐσία μὴ ἐπιδέχεσθαι τὸ μᾶλλου κς τὸ ῆτλου.—Arift. Præd. p. 28. Edit. Sylb. See Hermes, p. 201.

AGAIN, SUBSTANCE, they tell us, C. VII. admits of no Contraries (b). 'Tis to this that Milton alludes, when, after having personified Substance, he tells us,

To find a Foe it shall not be his hap,

And Peace shall lull him in her flow'ry lap (c).

THE Affertion is evident in compound Beings, that is to fay, in substances natural; for what is there contrary to Man considered as Man, or to Lion considered as Lion? This is true also in the Relation borne by MATTER to FORM; for while Contraries by their co-incidence destroy each other, these two, Matter

 ⁽b) Υπάρχει δε ταῖς ἐσίαις κὸ τὸ μηδεν αὐταῖς ἐναντίου εἶναι. Arift. Præd. p. 28. Edit. Sylb.

⁽c) Milt. Poems, No. II.

C.VII. and Form, coalefce so kindly, that no Change to either arises from their Union. Thus the Marble, when adorned with the Form of a Statue, is as precisely Marble, as it was before; and the Oak, when fashioned into the Form of a Ship, is as truly Oak, as when it flourished in the Forest. If there be any Contrariety in Substance it is that of Form to Privation, where Privation nevertheless is nearly allied to Non-entity.

LASTLY, SUBSTANCE they tell us is Something, which, though it have no Contrary, yet is by nature susceptible of all Contraries, itself still remaining one and the same (d).

WE cannot forget that description, given by VIRGIL, of the Cumean Prophetess.

 ⁽d) Μάλισα δὲ ἴδιον τῆς ἐσίας δοκεῖ εἶναι τὸ ταυτόν κὰ ἐν ἀριθμῷ ὂν τῶν ἐναντίων εἶναι δεκτικόν. Arift.
 Præd. p. 29. Edit. Sylb.

Non comptæ mansere comæ; sed pectus anhelum,

Et rabie fera corda tument (e).

Here we see her countenance and complexion perpetually changing, her hair dishevelled, her breast panting, and a transition too in her manners from sobriety to distraction. How different is all this from the appearance of that Sibyl, who first so courteously received Eneas at Cumæ, and afterwards so prudently attended him to the Shades? Yet, amidst all these Contrarieties, was she still the same Sibyl; she was susceptible of them all, without becoming another woman.

This last Character of Substance appears to be the most effential: for what is the Support of Contraries, or indeed of every Attribute, but Substance? Motion

⁽e) Æn. VI.

C.VII. and Rest, Heat and Cold, Health and Sickness, Vigour and Decay, are all to be found at times in each Individual of the human race. Most of the same Contraries are to be found among Brutes, and some of them descend even to the race of Vegetables.

Ir we descend from these minuter Substances to our terraqueous Globe, here Tempest and Calm, Frost and Thaw, Rain and Drought, Light and Darkness, have each their turn; yet leave it, when they depart, after all their seeming Contest, the same individual Globe, and not another. Thus the Poet, we have already quoted, still considering Substance, as a Person—

Yet he shall live in strife, and at his door
Devouring War shall never cease to roar:
Yea, it shall be his nat'ral property,
To harbour those that are at
ENMITY (f).

If we extend our views beyond the C. VII. Spot which we inhabit, what is the whole visible Universe, but the comprehensive Receptacle of every Contrary conceivable? Within this immense Whole they all distributively exist, while each of them by succession fulfils it's allotted period, without disturbing the general Order, or impairing the general Beauty.

But if we ascend from passive and material Substances up to such as are active and immaterial, here we shall find no Distribution, no succession of Contraties; but Motion and Rest, Equality and Inequality, Similarity and Dissimilarity, Identity and Diversity, will appear, each pair co-existing within the same Being in the same instant, and that by an amazing Connection of both together under One.

'Tis by virtue only of this combining, this unifying Comprehension (and which for C. VII.

for that reason can only belong to a Being unextended and indivisible) that the Mind or Intellect pronounces that A is not B, that C is unequal to D, that E is unlike to F. Were fuch Propositions, instead of being comprehended at once by fomething Indivifible and One, to be comprehended in portions by the different parts of something Divisible; or were they to be comprehended by a Power indivisible, yet not at once, but in a Succession; 'twould be as impossible either way to comprehend the real Propositions, as it would, if they were to be recognized in part by a Man in England, in part by one in China; or else in part by a Man in the present Century, in part by one of the fucceeding. It may be asked in such instances, who is it that comprehends THE WHOLE (g)?

⁽g) See Hermes, 1. iii. c. 4. Note (f). See also Aristot. de Animâ, 1. iii. c. 2. p. 52. Edit. Sylb. Themist. Paraph. p. 85. a. b.

MIND may we find such Coincidence, fince here not only Contraries, but all things whatever co-exist, and that too aster a manner peculiarly transcendent; not by a Knowlege which is partial, but by one which is universal; not with occasional remissions, but in one uniform unremitting Energy (h); not by subsequent Impressions from things already pre-existing, but by that original Causality, through which it makes all things to exist.

A NOBLE field for speculating opens upon this occasion; which, tho' arising out of our Subject, yet naturally leading us beyond it, we shall omit, and return to our Logical Inquiries, concluding here what we have to ad-

⁽h) See the Chapter on Quality, where the Verses of Empedocles are quoted.

C. VII. vance in our Theory concerning Sub-STANCE (i).

> We are now to confider the remaining Genera, Predicaments, or Ar-RANGEMENTS, that is to fay Quality, Quantity, Relation, Site, &c.

> Some of these are at all times no higher than Accidents; such for example as Site or Position, the Time When, and the Place Where. Others upon occasion characterize, and essentiate; such for example as Magnitude, Figure, Colour, and many Qualities. Thus a triply extended Magnitude is essential to Body; Angu-

⁽i) The Author, in the representing of ancient Opinions, has endeavoured, as far as he was able, to make all his Treatises confishent, and explanatory one of another. Those, who would see what he has already written on the two great Elements of Substance, discussed in this and the three preceding Chapters, may search the Index of Hermes for the Words, MATTER and FORM; and the Index of his first Volume, for the Word CAUSE.

larity to a Cube; Heat to Fire; and Co-lour to every Superficies not transparent. In all such Instances, they make a part of the Characteristic Form, and in that Sense are to be considered rather as Substances than as Accidents. However as this holds not always, and that they are sometimes as merely and as strictly Accidents, as any of those which are so always, we choose under that common Denomination to speculate upon them all, beginning according to Order sirst from the first.

CHAP.

CHAP, VIII,

Concerning QUALITIES—corporeal and incorporeal—natural and acquired—of
Capacity, and Completion—Transitions
immediate, and through a medium—
Dispositions, Habits—Genius—Primary
and imperfect Capacity—Secondary and
perfect—where it is, that no Capacities
exist—Qualities, penetrating, and superficial—Essential Form—Figure, an
important Quality—Figures intellectual,
natural, artificial, phantastic—Colour,
Roughness, Smoothness, &c.—Persons
of Quality—Properties of Quality—
Some rejected, one admitted, and why.

C.VIII. A S SUBSTANCE justly holds the first rank among these Predicaments, or universal Arrangements, by being the fingle one among them that exists of it-self,

felf, so the next in order, as some have C.VIII. afferted (a), is QUALITY, because Quality is said to be an Attribute, from which no Substance is exempt.

THERE may be Substances, they tell us, devoid of Quantity; such, for example, if we admit them, as the intellective, or immaterial. But that there should

be Substances devoid of Quality, is a

⁽a) This was the Opinion of Archytas-Πρώτα μευ τέτανλαι εσία-δευτέρα δε ά σοιότας-the first in Order is SUBSTANCE; the second, QUALITY. Simplic. in Præd. Quantitat. p. 31. Edit. Basil. Simplicius adds-ώσπες ή Οὐσία τε Ποσε ωρεπάρχει, διότι το είναι τῷ σοσῷ ἀπὸ τῆς ἐσίας ἐνδίδοται ἔτως κ μεία το Ποιου αν είη το Ποσου, έπειδη του χαρακτήρα αυτου, κ, τηυ ιδιότηλα από της ωσιότητ 🕒 έχει-As Substance precedes Quantity, because Being is imparted to Quantity from Substance, so also must Quantity succeed and COME AFTER QUALITY, in as much as it derives from Quality its very Character, and distinctive Peculiarity. - Ibid. - Το word λέγελαι ή δια-Φορα της εσίας - The DIFFERENCE, which attends each Substance, is called QUALITY. Arist. Metaph. A. c. 14. He explains it immediately—Man is a Biped Animal; Horse, a Quadruped.

C.VIII.

thing hardly credible, because they could not then be characterized, and distinguished one from another.

On this reasoning it is maintained, that, altho' we have no Idea of Quantity suggested to us in that animating Principle, THE SOUL, yet can we discern that this Principle has many different Qualities, and that Animals from these Qualities derive their distinct and specific Characters. There is for example a social Sympathy in the Soul of Man, which prompts the individuals of our Species to congregate, and form themselves into Tribes.

Homo sum, humani nihil a me alienum puto (b).

WE can trace the same congregating Quality in the Bee, in the Beaver, and

⁽b) Terent. Heauton. Act. I.

even in the ferocious Wolf. It is C.VIII. however less frequent in those of ferocious character; the greater part of whom, if we except those seasons while they breed and nurture their young, seem to feel no other instincts, but such as lead them to be folitary. 'Twas under this unseeling and gloomy character that Homer describes Polypheme, and his giant-brethren—

Παίδων, ηδ' αλόχων εδ' αλλήλων αλέγεσι.

—— Each lords it o'er

His children and his wives; NOR CARE

THEY OUGHT

ONE FOR ANOTHER (c).

IT is no less obvious on the other hand, that there are QUALITIES which may be considered as peculiar to Body.

⁽c) Odyf. I. ix. v. 114.

C.VIII. If we admit Figures, Colours, and Odours for Qualities, and such undoubtedly they are; we must admit of course, that among Animal Bodies there is one Figure to the Serpent, another to the Horse; one Colour to the Swan, another to the Parrot. Even in the vegetable Race, the Rose has one Odour, the Jessamine another; there is one Figure to the Orange, another to the Fig.

IT follows, therefore, that as QUA-LITIES help to distinguish not only one Soul from another Soul, and one Body from another Body, but (in a more general view) every Soul from every Body; it follows (I say) that QUALITIES, by having this common reference to both, are naturally divided into CORPOREAL and INCORPOREAL.

'Twas the judgment of Shakespear to unite them in the character of Richard the third, when he makes Bucking-

ham relate, in what manner he recommended him to the Citizens of London:

C.VIII.

Withal I did infer your lineaments,
Being the right Idea of your Father,
Both in your FORM, and NOBLENESS OF
MIND (d).

Virgil does the same with respect to Eneas, when he makes his heroic Virtue and his graceful Person have so powerful an effect upon the unfortunate Dido.

Quis novus hic nostris successit sedibus hospes?

Quàm sese ore ferens, quàm forti pectore et armis? (e)

THE Qualities abovementioned admit of another division, and that is into NA-TURAL and ACQUIRED. Thus in the

⁽d) Shakef. Rich. III.

⁽e) Æn. iv. 10, 11.

C.VIII.

Mind, Docility may be called a natural Quality; Science, an acquired one: in the human Body, Beauty may be called a natural Quality; Gentility, an acquired one. This distinction descends even to Bodies inanimate. To transmit Objects of Vision is a Quality natural to Crystal; but to enlarge them, while transmitted, is a character adventitious. Even the same Quality may be natural in one Substance, as Attraction in the Magnet; and acquired in another, as the same Attraction in the Magnetic Bar.

All the above Qualities have not only their Completion, but their Capacity (f). Thus not only the Grape, when com-

⁽f) Thus we translate the Words Έντελέχεια and Δίνωμις. Sometimes we read τὰ μὲν Δυνάμει, τὰ δὲ Γιεργεία. Δύναμις, Power, is feen in "Τλη, ΜΑΤΤΕΚ; Εντελέχεια, Completion, in Είδο, Form.

The Division abovementioned into Corporeal and Incorporeal, is taken from Plotinus, as we learn from Simplicius in Præd. p. 69. B.

plete (that is to fay, when mature) poffesses a delicious Flavour; but there is a Capacity also to produce it, residing in a simple Grape-stone. Even in artificial Substances, there are in like manner Capacities. A Grain of Gun-powder has the Capacity of explosion; a musical Instrument, that of rendering Harmony. If, leaving these artificial and vegetative Substances, we go still higher; we shall in Animals find Capacities, commonly known by the name of Instincts, to which the frame of every Species is peculiarly accommodated, and which Frame such Instincts internally actuate.

Dente lupus, cornu taurus petit; unde nisi

Monstratum ? - (g)

IN MAN there is a Capacity to Science and Virtue; and well would it be for

⁽g) Horat. Sat. ii. 1. 52.

C.VIII. him, if not also to their Contraries. Yet such is our Nature, such the peculiar character of the Reasoning Faculty, belonging to us as Men; it is capable of either Direction (h), and may be employed, like the same Weapon, as well to Evil as to Good.

Nor are there such Qualities only as Capacities, but there is a contrary and ne-

⁽b) Ἐπαμφοτερίζει τάσα ή λογοειδής [δύναμις]—
Every Power of the Rational kind has a Capacity either way, that is, a double Capacity. Ammon. in Præd.

p. 127. Ai μεν εν μετα λόγε δυνάμεις, αι αὐτας τλειόνων κ των εναντίων—The Powers, that are connected with the Reasoning Faculty, are the same with respect to various and contrary Operations. Arift de Interpr. p. 75. Edit. Sylb.

^{&#}x27;Tis thus Medicine, as an Art, can cause Sickness, as well as Health; Music, as an Art, can cause Discord, as well as Harmony—And why this?—Because they are both founded in Reason; and 'tis the same Reason, in all instances, which shews us the Thing, and shews us also it's Privation.—O δε λόγω ὁ αὐτὸς δηλοῖ τὸ ωρᾶγμα, κὸ τὴν είρησιν. Arist. Metaph ix. 2. p. 143. Edit. Sylb. Lee also pages 147, 153, of the same Work.

gative Sort, which may be called INCA- C.VIII. PACITIES (i); and these also of different Kinds, some for better, some for worse; so that where the Capacities do honour, there the Incapacities debase; where the Capacities debase, there their Opposites do honour. Thus to the Power of being taught, an honourable Capacity, is opposed the Incapacity of being taught, a debasing one; and hence is Man distinguished from an Insect, and the one called docil, the other indocil. Again, to the Power of dying, a debasing Capacity, is opposed the Inability of dying, a superior one; and thus are superior Beings called immortal (k) in the way of excellence,

⁽i) Δυνάμεις, 'Αδυναμίαι. Arift. Præd. p. 41. Edit. Sylb.

⁽k) Sappho, the celebrated Poetes, has a singular Sentiment upon this Subject.—Το ἀποθυήσκειν κακόν οἱ Θεοὶ γὰς ὅτω κεκρίκασιν ἀπεθυήσκον γὰς ἄν—Το die, is an Evil; the Gods have so determined it, or else they would die themselves. Arist. Rhet. l. ii. c. 22. S. 27.

C.VIII. whilst Man is called mortal, with a view to subordination.

> THE Transition from Qualities of Capacity to those of Completion, is sometimes immediate, sometimes through a Medium. Thus in a Grain of Gunpowder, the Transition from the power of exploding, to actual explosion, is immediate; so from the power of hearing, to actual hearing; from the power of feeing, to actual fight; and the same inthe other Senses (1), all which we seem to

possess

All this holds with regard to the INTELLECT or MIND, but by no means with regard to the SENSES,

⁽¹⁾ The Peripatetics made two Sorts of Capacity, both of which have a foundation in Nature, and yet are evidently distinguished the one from the other. Man, as a rational Being, is capable of Geometry. -This is the first Capacity.—After he has acquired the Science of Geometry, he possesses it, even when he does not geometrize .- This is the fecond Capacity; a Capacity acquired indeed by Labour, but when once acquired, called forth in an inflant; a Capacity founded on the original one, but yet in every view of it far fuperior and more valuable.

possess in a sort of perfection from the be- C.VIII. ginning. But there are other Capacities, and those none of the meanest, where

for these are perfect, or nearly so, from the beginning, and require neither Time, nor Teaching, for their Maturity.

" Orav อิะ ของเทษกั, รัฐยะ ที่อีก ผือสอก อิสเรทุนทุง นา ซอ αἰσθάνεσθαι, κὸ τὸ κατ' ἐνέρΓειαν ὁμοίως λέγεθαι τῷ Dewperiv - As soon as any one is born, he immediately posfeffes Senfe, as he would actual Science; and the Energy of Sensation has a similar meaning with that of actual scientific Speculating. Arift. de An. ii. 5. He means by this, that every Man originally fees with the fame ease, as an able Geometrician goes thro' a Theorem. There is none of the fatigue and labour and delay of a Learner: Seeing and Hearing have no need to be taught us.

Animum autem reliquis rebus ita perfecit, ut Corpus : Sensibus enim ornavit ad res percipiendas idoneis, ut nihit aut non multum adjumento ullo ad fuam conformationem indigeret. Quod autem in homine præstantissimum et optimum eft, id. &c. Cic. de Fin. 1. v. c. 21.

And here, by the way, we may perceive a capital Distinction between those two Powers or Faculties of the Soul, SENSE and INTELLECT, which Faculties in vulgar Speculations are too often confounded. In INTELLECT there is an Advance to better and more complete; a Progression wholly unknown to the Powers of SENSE, which is complete from the very beginning, through all it's Operations.

C.VIII. the Transition to Completion is necesfarily through a Medium.

> Qui studet optatam curfu contingere metam, Multa tulit, fecitque puer——— (m)

> IF an Art be our End, there are many Energies to be practised; if a Science, many Theorems to be understood.; if Moral Virtue, many Appetites to be curbed, many Opinions to be eradicated, before we can attain the wished for Goal. The Qualities, which distinguish any Being, during this changeable period, may be called TENDENCIES, DISPOSITIONS, or Progressive Qualities. They are too, as well as Capacities, of a different colour, some good, some bad. There is a kind of laudable Progression, before we arrive at perfect Virtue; as there is a kind of degenerating Interval, before we fink into perfect Vice.

⁽m) Hor. Art. Poet. v. 412.

Our Tendencies during these intervals C.VIII.

are easy to be interrupted. As the Wiles of Pleasure, and an ill-directed Shame, are often satal Checks to a young Prosicient in Virtue; so are Conscience and a better Shame to young Beginners in Vice. And hence we may perceive the true character of these Tendencies; which is, that of all Qualities they are the least steady and permanent. Horace well describes this state of sluctuation:

----- Si toga dissidet impar,

Rides: Quid, mea cùm pugnat sententia secum;

Quod petiit, spernit; repetit, quod nuper omisit;

ÆSTUAT, ET VITÆ DISCONVENIT ORDINE TOTO (n).

'Tis to the same mutable Condition that Epictetus alludes, where, having spoken

⁽n) Horat. Epist. 1. i. 96.

C.VIII.

upon Proficiency, he subjoins the following advice—" That after a certain time "his young Philosopher should exhibit "himself, to see how far the Fancies overpowered him, as they did before; and how far he was now able to resist their influence. He advises him, however, to sly at first such Conslicts, as "would put his Virtue to a trial too seever; and quotes the proverb on the cocasion, that the Metal Pot and the Stone Pot do not with safety ac"cord (0)".

Such therefore is the character of these Tendencies, or Dispositions (p). But different is the case, when their course is sinished, and when they may be said to have attained their Maturity and Completion. The Man completely virtuous

⁽⁰⁾ Arrian. Epietet. 1. iii. c. 12.

⁽p) Διάθεσις, Disposition; Eξις, Habit. Arist. Cat. p. 40. Edit. Sylb.

dreads no allurements; the Man completely vicious feels no compunctions.

Like sturdy Oaks, they defy that force, which could easily have bent them, while they were but saplings.

an Estate, because we are not said to have an Estate, because we are walking upon it, or to have a Picture, because we are holding it; but to have them, implies a superior, a more permanent possession, such as either cannot be defeated, or at least not easily; hence I say these Completions, whether virtuous or vicious, are called, from their steadiness and permanence, Habits (q). They are Possessions, which their

⁽q) Διαφέρει Εξις Διαθέσεως τῷ την μὲν εὐκίνητον εἶναι, την δὲ ωολυχρονιώτερον, κ) δυσκινητότερον. HABIT differs from DISPOSITION, as the latter is eafily moveable, the former is of longer duration, and more difficult to be moved. Arift. Præd. p. 40. Edit. Sy'b.

And just after, having spoken of Warmth and Cold, of Health and Sickness, and shewn how far these, when

C.VIII. their owner may properly be said To HAVE, and by which we call him habitually good, or habitually bad. The Professors of Medicine find this Distinction in human Bodies. 'Tis not any Health, (such as health just recovered, or with difficulty preserved) but 'tis confirmed and steady Health, which they call a GOOD HABIT OF BODY. They have reference in Diseases to the same Permanence, when they talk of HECTIC Coughs, and HECTIC Fevers, Complaints not casual, but which make a part (as it were) of the Constitution.

when they are mutable and shift easily, may be called Dispositions, he subjoins, that so it is - no un Tis x αὐτῶν τέτων τυίχάνει δια χρόνε ωληθω ήδη συμπεφυσιωμένη η ανίατ (legitur ακίνητ), η σάνυ δυσκίνητ 🕒 έσα, ην άντις ἴσως ΕΞΙΝ ηδη φροσαδορεύοι-Unless any one of these very affections should by length of time become naturalized, and grow either immoveable, or only to be removed with difficulty; which perfection then perhaps we may call a HABIT. Arist. Præd. p. 41. Edit. Sylb.

AND thus besides the Distinctions of C.VIII. CORPOREAL and INCORPOREAL, of NATURAL and ACQUIRED, may all QUALITIES be considered as CAPACITIES, as Tendencies, and as Habits; as Capacities only and Habits, where the transition is immediate; as all three successively, where the transition is through a Medium.

IT is worth while to observe in the human Mind the fuccessive appearance of these Qualities, where during the Transition there exists a Medium or Interval. The original Power, which the Mind possesses of being taught, we call NATURAL CAPACITY; and this in some degree is common to all Men. The superior Facility of being taught, which some possess above the rest, we call Genius. The superior transitions or advances from natural Power, we call Proficiency; and the

C.VIII. the End or Completion of Proficiency we call HABIT.

If such Habit be conversant about Matter purely Speculative, it is then called Science; if it descend from Speculation to Practice, it is then called Art; and if such Practice be conversant in regulating the Passions and Affections, it is then called Moral Virtue.

Even all these *Habits*, after having been thus acquired, can return at times into Capacity, and there lie dormant and for a time unperceived.

Alfenus vafer, omni
Abjecto instrumento artis, clausaque taberna,
Sutor erat——— (r)

WIDE however is the difference between this habitual, Secondary Capa-

⁽r) Horat. Sat. i. 3. 130.

city (s), and that which is natural and C.VIIIs briginal. The habitual can pass AT ONCE, when it pleases, into perfect Energy; the natural, only thro' the Medium of Institution and REPEATED PRACTICE.

THE several Qualities thus variously distinguished are to be found only in Beings of subordinate Nature. But if there be a Being, whose Existence is all-perfect and complete, and such must that Being necessarily be, the Source of Perfection to all others; with the nature of such Being this Variety will be incompatible. In Him are no Powers or dormant Capacities, no Proficiencies or Transitions from worse to better, and still

⁽s) See before Note, p. 152—εχ άπλε όντων τε δυνάμει λείομενε, άλλα τε μεν ώσπερ αν είπομεν τον παίδα δύνασθαι ερατηγείν, τε δε ώς τον εν ήλικία όντα — CAPACITY or POWER is not a simple Term of one Meaning only, but there is one Sort, when we say of a Child, he has a Capacity to be a military Leader; another, when we say so of a Man, who is in complete Maturity. Arist. de An. l. ii. c. 5. p. 33. Edit. Sylb.

C.VIII. much less from better to worse; but a full and immutable Energie thro' every part of Space. 'Twas concerning this divine Principle that Empedocles sung of old.

Οὖτε γὰρ ἀνδρομέη κεΦαλή κατὰ γυῖα κέκαςαι, Οὐ μὲν ἀπαὶ νάτων γε δύο κλάδοι ἀΐσσεσιν,. Οὐ σόδες, ἐ θόα γενα, ἐ μήδεα λαχνήενδα, ᾿Αλλὰ Φρην ἱερη, κὰ ἀθέσΦατ ἐπλετο μενον, Φροντίσι κόσμον ἄπανδα καταΐσσεσα θοῆσι..

No Limbs hath he, with human head a-dorned;

Nor from his Shoulders branch two sprouting Arms;

To him belong nor feet, nor pliant knees;
But MIND ALONE he was; ineffable,
And HOLY MIND; that rapidly pervades
With providential cares the mighty
World (t).

⁽t) See Ammon. in Lib. de Interpret. p. 199. B. and Poef. Philosoph. Hen. Step. p. 30, where, instead of ἔτε γας ανδρομέη, we read & μέν γας βροτέη.

And here it may be observed by way of digression, that in this part of Ammonius, a part truly valuable,

THE Speculations of this Genus, or C.VIII.

Arrangement, having now carried us to the sublimest of all Objects, ought here to end. But as there still remain a few observations, and besides these a disquisition into the Properties of the Genus,

and deeply philosophical, we meet in the printed text two Chasms, which much impair the meaning. The first occurs p. 199. B. line 19, between the words τῶν—κὰ τῶν. Here a MS. Collation supplies the word ἀφανῶν. The second occurs p. 200, line 2, after the word συνιέντων. Here the same MS. supplies the following valuable Reading, which lies far beyond the reach of the most acute Conjecture. The words are—κ συνιέντων [ὅτι ωεξιπετάσμαλα τῆς ἀληθείας εἰσι.]

There is a third Reading from the same Authority, in the fourth line of the same page, which is an excitor, instead of in excitor, a Reading manifestly better, though not so important as the former.

The Edition of Anmonius, here referred to, is that of Venice, in 12mo in the year 1545. The fame places may be found in the Edition of Aldus at Venice, in 12mo in the year 1546, page 172, B. p. 173, and in the Fol. Edition of the fame Aldus, in the year 1503, where the pages are not marked, but where the above Chasms easily shew themselves to the Reader's eye.

C.VIII. and that the apparent, as well as the real; we cannot quit the subject, till these inquiries have been first satisfied.

Thus then the Treatise proceeds.

WITH respect to QUALITIES PURELY CORPOREAL, they may be confidered either as penetrating Body, such as Gravitation, Heat, Flavour, and the like; or else as confined to the Surface, such as Figure, Colour, Smoothness, Roughness, &c. Those internal Qualities which pervade the whole, (whether they arise merely from Organization, or include that, and fomething more) conflitute what we call essential Form or natural Essence. And hence the just Idea of natural Essence, or essential Form (u), which confifts in giving a Character to the subject, which it pervades. 'Tis thro' this internally pervading Character, that Substances are what they are; that they become not

⁽u) See before, p. 89, 90, 91.

only distinguished from one another, but C.VIII. from the nicest Mimicries of Art; the real Orange from the Orange of Wax, the living Lion from the Lion painted.

INDEED one of the capital Distinctions between Operations Natural and Artificial, is, that Nature penetrates, while Art stops at the surface. 'Tis the Surface of the Canvas, which the Painter covers; the Surface of the Gem, which the Jeweller polishes; the Surface of the Steel, to which the Smith gives a Figure; and the Surface of the String, to which the Musician applies his Bow. There is hardly any deviation from this rule with respect to Arts, if we except those only, (such as Cookery and Medicine) the business of which consists principally in compounding natural Materials. Here indeed the Proportions pass thro' the whole Composition, and the more accurate these Proportions, the greater of course the merit of each Artist.

C.VIII.

It must be remembered however, that the artificial Qualities are mostly superficial, yet are not all natural Qualities to be considered as internal. The Form or Essence of every natural Substance (that is to say, in other words, it's System of internal Qualities) extends itself outwardly (x) every way from within; and, as it must necessarily stop somewhere, (every individual being finite) so according to the different points, at which it stops in it's Evolution, it communicates to each Substance a different and peculiar Figure. And hence the

⁽x) "Ωσπερ δε της διας άσεως το τελ ες ες το Σχημα, έτως η τε όλε είδες αποτελεύτησις άχρι της επιφανείας την Μορφην απεγέννησεν, εσαν αὐτην το φαινόμενον ίχνω τε Είδες, κὸ τελευταίαν έκτασιν της τε
λόγε επὶ τὰ ἐκτὸς ωροόδε—Simplic. in Præd. p. 69.
Β. Edit. Basil.—For as the End or Extremity of any
Extension is the FIGURE, so the Ending of a complete
Form, at it's Surface, produces SHAPE; Shape being
itself the apparent Vestige of that Form, and the ultimate
Extent of that Progression, which the internal Ratio
makes outwards.

ARRANGEMENTS.

true character of every NATURAL and C.VIII.

Specific Figure, which ought not to
be confidered merely as a Surface, but
as a Bound; the Bound, to which the
internal Essence or Form every way extends itself, and at which, when it is arrived, it finally terminates.

For this reason it is, that of all the external Qualities there is none so capital, so characteristic, as Figure. 'Tis a kind of universal Signature, by which Nature makes known to us the several Species of her Productions; the primary and obvious test, by which we pronounce this a Vegetable, and that an Animal; this an Oak, and that a Lion: so that if we neither suspect fraud, nor the fallibility of our own Organs, we commonly rest here, and inquire no farther.

IF we pass from these natural Subjects to contemplate Figure in works of Art, we shall discover it to be almost all, that

M 4. Art

C.VIII. Art is able to communicate. 'Tis to this that the Painter arrives by Addition; the Sculptor by Detraction; the Founder by Fusion; and the Stucco-Artist by Moulding. Even when we contemplate the Tools of Art, it will appear that as 'tis by virtue of their Figure alone the Saw divides, the Hammer drives, and the Pincers extract; so is it from these feveral Figures, that they derive their Character and their Name, not from their Matter, which Matter is often the same, when the Tools are totally different, and distinct one from another *.

> Nor are these artificial the only Figures, with which Man is found converfant. Among the various possibilities, which the Mind suggests, there is a more accurate tribe of Figures, which it recognizes and defines, and which, it may be justly questioned, whether Matter

^{*} See before, Chap. IV.

ever possessed; for example, the perfect C.VIII. Triangle, the perfect Circle, the perfect Pyramid, the perfect Sphere, with the rest of those Figures commonly called MATHEMATICAL *. These are not sought out by Experiments, nor are the Truths dependent on them derived from Experiments, being in fact the result of a more authentic Knowledge, that is to fay in other words, of the purest Demonstration. On these Figures, and their dependent Truths, rests the whole of Mechanics, so highly useful to human life; rest Astronomy and Optics, and a large part of Physics, some of the noblest subjects among the corporeal for contemplation.

THE industry of Man stops not even here, but prompts him to search for Figures, not only in his Intellect, but in a lower faculty.

^{*} See the third Treatise of Vol. first, p. 220, 370, 371.

C.VIII. The Poet's Eye in a fine Phrenzy rolling

Doth glance from Heav'n to Earth, from

Earth to Heav'n,

And as IMAGINATION bodies forth

THE FORMS OF THINGS UNKNOWN, the Poet's Pen

Turns them to Shape, and gives to airy nothings

A local Habitation and a Name (z).

And hence that tribe of FIGURES, which are neither natural, nor artificial, nor intellectual, but which make a fourth fort, that may be called PHANTASTIC, or IMAGINARY; such as Centaurs, Satyrs, Sphinxes, Hydras, &c.

And so much for Figure, that most capital Quality of all the superficial.

THE next Quality of this fort after Figure is Colour, the Source, like Fi-

⁽z) Shakef. Midf. Night's Dream, Act V. Sc. I.

gure, of many Varieties and Distinctions. C.VIII. Yet that it is inferior to Figure, is obvious from this: in the Sketches of a Painter, we know things by their Figures alone, without their Colours; but not by their Colours alone, when divested of their Figures.

As for Roughness, Smoothness, Hardness, Sostness, tho' they may be said perhaps to penetrate farther than the Surface, yet are they, to *Man's* Sensation at least, so many *Qualities Superficial*.

And now with respect to all kinds of QUALITIES whether corporeal or incorporeal, there is one thing to be observed, that fome degree of Permanence is always requisite; else they are not so properly Qualities, as incidental Affections (a). Thus

⁽a) These Arifotle calls Πάθη.—Οὖτε γὰς ὁ ἐρυθρίων διὰ τὰ αἰχύνεσθαι, ἐρυθρίας λέγεθαι, ἔτε ὁ ἀχριων διὰ τὸ Φοβεῖσθαι, ἀχρίας ἀλλὰ μᾶλλου ωεπονθέναι τι ὥς ε ωάθη μὲυ τὰ τοιαῦτα λέγεθαι, ωοιότηθες δὲ ἔ.

C.VIII. we call not a man passionate, because he has occasionally been angered, but because he is prone to frequent anger; nor do we say a man is of a pallid or a ruddy Complexion, because he is red by immediate exercise, or pale by sudden fear, but when that Paleness or Redness may be called constitutional.

WE have said already, that it was the Essence of all Qualities to CHARACTERIZE and DISTINGUISH. And hence the Origin of that Phrase, a Person of Quality; that is to say a Person distinguished from the Vulgar by his Valour, his Wisdom, or some other capital Accomplishment. As these were the primary Sources of those external Honours, paid to eminent

Men

⁻Neither is the Man, who blushes from being ashamed, called of a Reddish Complexion; nor is he, who turns pale from being frightened, called of a Palish Complexion, but they are rather said to have been particularly affected; for which reason such Events are called incidental Affections, and not QUALITIES. Aristot. Præd. p. 43. Edit. Sylb.

Men in Precedencies, Titles, and various C.VIII. other Privileges; it followed that these Honours by degrees grew to represent the things honoured; so that as Virtue led originally to Rank, Rank in after days came to infer Virtue; particular Ranks, particular Virtues; that of a Prince, Serenity; of an Ambassador, Excellence; of a Duke, Grace; of a Pope, Holiness; of a Justice or Mayor, Worship, &c. &c.

As to the GENERAL PROPERTIES of QUALITY, they may be found among the following.

Contrariety appertains to it (b). Thus in the corporeal Qualities, Hot is contrary to Cold, and Black to White. So too in mental Qualities, Wisdom is contrary to Folly, and Virtue to Vice: subordinate Virtues to subordinate Vices; Liberality to Avarice, Courage to Cowardice. Even Vices themselves are con-

 ⁽b) Υπάρχει δε Έναντιότης κατα τὸ ωοιον, κ. τ. λ.
 Arift. Præd. p. 44. Edit. Sylb.

C.VIII. trary one to another; Cowardice to Temerity; Avarice to Profusion. It may be doubted, however, whether this character of Quality be universal; for what among Figures is there Contrary in one Figure to another, either in the Square to the Circle, or in the Circle to the Square?

ANOTHER Property of Qualities is TO ADMIT OF INTENSION AND REMISSION (c). Thus of two Persons handfome, there may be one the handsomer; and among many handsome, one the handsomest.

Πασάων δ' ὖπερ ήγε κάρη ἔχει, ήδὲ μέτωπα, $^{\circ}$ Ρεῖα δ' ἀριγνώτη $^{\circ}$ κέτεται, καλαὶ δέ τε $^{\circ}$ σάσαι $^{\circ}$ α).

Far above all she bears her tow'ring head, With ease distinguish'd, tho' they all are fair.

So Sir John Falstaff, speaking to his Companion, the young Prince—I am

 ⁽ε) Ἐπιδέχεῖαι δὲ τὸ μᾶλλου κὰ τὸ ἦτῖου τὰ τοιά·
 κ. τ. λ. Arift. Præd. p. 45. Edit. Sylb.

⁽d) Hom. Odyf. Z. 107.

not John a Gaunt, your Grandfather; and C.VIII.

yet I am no Coward (e).

IT appears, however, that the abovementioned Species of Quality called Figure no more admits this Property, than it did Contrariety. The Figures, which are Triangles, are not more so one than another; no more are the Circles, Circles; the Squares, Squares, &c. which seems indeed to arise from their definitude and precision *.

But there is a *Property* to be found, which may justly deserve the name, by being common at least to the whole Genus, if not peculiar to that only: and this Property is, that BY VIRTUE OF THEIR QUALITIES THINGS ARE DENOMINATED LIKE and UNLIKE (f). 'Tis thus that

⁽e) Shakef. Hen. IV.

^{*} See Hermes, p. 200.

⁽f) Όμοια δὲ ἢ ἀνόμοια κατὰ μόνας τὰς ωσιότητας λέγελαι· ὅμοιον γὰς ἔτερον ἐτέρω ἔκ ἐςι κατ' ἄλλο ἐδὲν, ἢ καθ' δ ωσιόν ἐςιν. Arift. Præd. p. 45. Edit: Sylb.

C.VIII. the Swan by his Quality of Whiteness resembles the Snow; that Achilles by his Quality of fierceness resembles a Mastiff; and that the Earth by her Quality of Figure is like to a Bowl.

From this Property we see the reason, why there is no Arrangement, to which the Poets are so much indebted, as to this; fince hence they derive those innumerable Images, which fo strongly distinguish Poetry from every other Species of Writing. For example: let us suppose a young Hero just slain; let us suppose him lying, with a drooping head, a face divested of life and bloom, yet still retaining traces both of beauty and of youth. The Poet would illustrate this pathetic Image by finding something that resembles it. And where is he to search, but where he can discover similar Qualities? He finds at length an affemblage of them in a flower just gathered: the fame drooping head, the same lifeless fade, fade, the same relicts of a form that was C.VIII. once fair and flourishing.

Thus then Virgil, speaking of young Pallas—.

Qualem virgineo demessum pollice storem
Seu mollis violæ, seu languentis hyacinthi,
Cui neque fulgor adhuc, necdum sua forma
recessit;

Non jam mater alit tellus, viresque ministrat (g).

AGAIN, what would Milton have us conceive, when he describes the tremendous Shield of Satan?—Those conspicuous Characters of Brightness, Vastness, and Rotundity. To what subject then ought he to refer, that we may comprehend what he would describe? It must be to one, that eminently possesses an assemblage of the same Qualities. Let the Poet in his own Words inform us what this Subject is:

⁽g) Æn. xi. 68.

C.VIII. —— The broad Circumference Hung on his Shoulders, LIKE THE MOON (h).

THE reason of this Property may be perhaps as follows. To be like is something less than to be perfectly the same, and fomething more than to be perfectly different. And hence it is, that when two things are called like, there is implied in their nature fomething of Sameness, and something of Diversity. If it be asked what the Sameness is, we answer, it must be something more definitive than those transcendental Samenesses, which run thro' all things. We say not that a piece of Ebony is like a Swan, because they both are; or that a Crow resembles a Snow-ball, because each of them is One, and not two. The Identity must be fought from among the number of those Qualities, the nature of which is less

⁽h) Par. Left, 1. i. 286.

lar Species. Let Blackness, for example, be a Quality of this character in that union of Qualities, which constitutes Ebony; and let the same Quality be one also in that union, which constitutes a Crow. So far then the Ebony and the Crow are the same; thro' every other Quality perhaps they are different; and thro' Sameness, thus temper'd by Diversity, they become, and are called LIKE (i).

THE same happens to the Earth and a Bowl, from their common Rotundity; to the Hero and the Massiff, from their common Ferocity.

AND so much for the fecond universal Genus, Arrangement, or Predicament, the Genus of QUALITY, it's various SPE-CIES, and it's different PROPERTIES.

⁽i) See Note, p. 90. and Note, p. 190.

C H A P. IX.

Concerning QUANTITY—it's two Species—their characters—Time, and Place—their characters—Property of Quantity, what—Quantities relative—Figure and Number, their Effect upon Quantity—Importance of this Effect—Sciences Mathematical appertain to it—their use, according to Plato—how other Beings partake of Quantity—Analogy, found in Mind—Common Sense and Genius, how distinguished—Amazing Efficacy of this Genus in and thro' the World—Illustrations.

Ch.IX. HE Attribute of Substance, standing in Arrangement next to Quality, is QUANTITY; the former having precedence, as being supposed more universal; while the latter, at least in appearance,

pearance, seems not to extend beyond Ch.IX.

Our of natural Bodies is the visible World composed, and we may contemplate them in different manners; either one Body taken by itself and alone; or many Bodies taken collectively, and at once. When Virgil says of the Oak,

—— QUANTUM vertice ad auras Ætherias, TANTUM radice ad Tartara tendit——— (a)

or when Milton informs us, that

Behemoth, biggest born of Earth, upheaved HIS VASTNESS——— (b).

in these instances we have only one Body, taken by itself and alone, and this naturally suggests the Idea of MAGNITUDE. But when in Virgil we read,

⁽a) Geor. ii. 291.

⁽b) Par. Loft. vii. 471.

Ch.IX. Quàm MULTA in sylvis autumni frigore primo

Lapsa cadunt folia- (c).

or when in Milton,

Thick as autumnal leaves, that strew the brooks

In Vallombrosa- (d).

in these instances we have many Bodies taken collectively and at once, and this naturally suggests the Idea of MULTITUDE.

HORACE gives the two Species together in his fine address to Augustus:

Cum Tot sustineas et TANTA negotia-(e).

Now in MAGNITUDE and MULTI-TUDE we behold these two primary,

⁽c) En. vi. 309.

⁽d) Par. Lost, i. 302.

⁽e) Horat. Epift. 1. ii. 1.

these two grand and comprehensive Spe- Ch.IX. cies, into which the Genus of Quantity is divided; MAGNITUDE, from it's Union, being called QUANTITY CONTINUOUS; MULTITUDE, from it's Separation, QUAN-TITY DISCRETE (f).

Of the Continuous kind is every Solid; also the bound of every Solid, that is, a Superficies; and the bound of every Superficies, that is, a Line; to which may be added those two concomitants of every Body, namely Time and Place. Of the Discrete kind are Fleets, Armies, Herds, Flocks, the Syllables of Sounds articulate, &c.

WE have mentioned formerly (g), when we treated of Time, that every Now

⁽f) Τε δε Ποσε το μέν έςι διωρισμένου, το δε συvexes. Aristot. Præd. p. 30. Edit. Sylb.

⁽g) See Hermes, lib. i. c. 7. p. 103, 104.

Ch.IX. or present Instant was a Boundary or Term, at which the Past ended, and the Future began; and that 'twas in the Perpetuity of this Connection, that Time became continuous. In like manner within every Line may be affumed infinite fuch Connectives, under the character of Points; and within every Superficies, under the character of Lines; and within every Solid, under the character of Superficies; to which Connectives these Quantities owe their Continuity. And hence a Specific Distinction, attending all Quantities continuous, that their several Parts every where coincide in a common Boundary or Connective (h).

Ir is not so with Quantities discrete: for here such Co-incidence is plainly impossible. Let us suppose, for example, a

⁽b) See Arift. Pradic. p. 31. Edit. Sylb.—ń δε γραμμή συνεχής ές ιν, κ. τ. λ. This Character is deferibed to be—webs τινα κοινον δρον συνάπθειν.—Ibid.

Multitude of Squares; x, y, z, &c: C.VIII.

Here if the Line AB, where the Square x ends, were the same with the Line CD, where the Square y begins, and EF in like manner the same with GH; they would no longer be a *Multitude* of Squares, but one continuous Parallelogram, such

as
$$\underset{M}{\stackrel{K}{=}}$$
 the figure KMNL.

ANOTHER Specific Character belonging to the Solid Body, the Superficies, and the Line, (all of which are Quantities Continuous) is, that their Parts have a definite Position within some definite Whole (i); while in Quantities discrete,

⁽i) "Ετι, τὰ μὲν ἐκ θέσιν ἐχόντων ωρὸς ἄλληλα τῶν ἐν αὐτοῖς μορίων συνές ηκε οἶον τὰ μὲν τῆς γραμμῆς μόρια θέσιν ἔχει ωρὸς ἄλληλα, κ. τ. λ. Arift. Præd. p. 31. Edit. Sylb.

Ch.IX.

that is in Multitudes, such Position is no way requisite. In the most perfect continuous Quantities, such as Beams of Timber, Blocks of Marble, &c. 'tis with difficulty the Parts can change Position, without destruction to the Quantity, taken as continuous. But a herd of Cattle, or an Army af Soldiers, may change Position as often as they please, and no damage arise to the Multitude, considered as a Multitude.

It must be remembered however, that this Character of Position extends not to Time, tho' Time be a Continuous Subject. How indeed should the Parts of Time have Position, which are so far from being permanent, that they fly as fast as they arrive? Here therefore we are rather to look for a Sequel in just Order (k); for a

 ⁽k) ⁽¹⁾Ο δε μή ες το ὑπομένου, πῶς ἀν τἔτο Θέστιν τινὰ ἔχοι; ἀλλὰ μᾶλλου τάξιν τινὰ εἴποις ἀν ἔχειν, τῷ τὸ μεν πρότερου εἶναι τᾶ χρόνε, τὸ δε ὑς ερον. Arift. Præd. p. 32. Edit. Sylb.

Continuity not by Position, as in the Ch.IX. Limbs of an Animal, but for a Continuity by Succession;

---- velut unda supervenit undam (1).

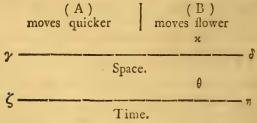
And thus are the two Species of Quantity, THE CONTINUOUS and THE DISCRETE distinguished from each other.

themselves there is a farther Distinction. Body and it's Attributes, the Superficies and the Line, are continuous Quantities, capable all of them of being divided; and by being divided, of becoming a Multitude; and by becoming a Multitude, of passing into Quantity Discrete. But those continuous Quantities, Time and Place, admit not, like the others, even the possibility of being divided. For grant Place to be divided,

⁽¹⁾ Horat. Epift. ii. 2. 176.

Ch.IX. as Germany is divided from Spain: what interval can we suppose, except it be other Place?—Again, suppose Time to be divided, as the Age of Sophocles from that of Shakespeare: what Interval are we to substitute, except it be other Time? Place therefore and Time, tho' continuous like the rest, are incapable of being divided, because they admit not, like the rest, to have their Continuity broken (m).

In this Sense of potential Division, they may be divided infinitely, as appears from the following Theorem.



Let A and B be two Spheres, that are moving, and let A be the quicker moving Sphere; B, the flower;

⁽m) They cannot be divided ACTUALLY, from the reasons here given;—but they may be divided IN POWER, else they could not be CONTINUOUS; nor could there exist such Terms, as a Month, a Year, a Cubit, a Furlong, &c.

But to proceed. Let us imagine, as Ch.IX. we are walking, that at a distance we view a Mountain, and at our feet a Mole-hill. The Mountain we call Great, the Mole-hill Little; and thus we have two opposite Attributes in Quantity Con-

and let the flower have moved thro' the Space 28 in the Time In. 'Tis evident that the quicker will have moved thro' the same Space in a less Time. Let it have moved thro' it in the Time (8. 'Tis thus the Sphere A divides the Time. Again, in as much as the quicker A has in the Time (0 past thro' the whole Space 20, the flower B in the same Time will have past thro' a smaller Space. Let this be yn. 'Tis thus the Sphere B divides the Space. Again, in as much as the flower Sphere B in the Time (8 has past thro' the Space ya, the quicker Sphere A will have past thro' it in a less Time; so that the Time (8 will be again divided by the quicker Body. But this being fo divided, the Space yx will be divided also by the flower Body, according to the fame Ratio. And thus it will always be, as often as we repeat fucceffively what has been already demonstrated: for the quicker Body will after this manner divide the Time; and the flower Body will divide the Space; and that, in either case, to Infinite, because their Continuity is infinitely divisible in power. See the Original of this Theorem in Aristotle's Physics, lib. vi. cap. 2. p. 111. Edit. Sylb. "Εςω το μεν εφ' ώ α, 26. T. A.

tinuous.

Ch.IX. tinuous. Again, in a meadow we view a Herd of Oxen grazing; in a field, we fee a Yoke of them ploughing the land. The Herd we call Many, the Yoke we call Few; and thus have we two fimilar Opposites in Quantity Discrete.

> Or these four Attributes, Great and Many fall under the common name of Excess; Little and Few under the common name of Defect. Again, Excess and Defect, tho' they include these four, are themselves included under the common name of Inequality. Farther still, even Inequality itself is but a Species of Diversity; as it's Opposite, Equality, is but a Species of Identity. They are subordinate Species confined always to Quantity, while IDENTITY AND DIVERSITY (their Genera) may be found to pass thro all things (n).

Now

⁽n) The following Characters of the three first great Arrangements, or universal Genera, are thus described by

Now 'tis here, namely in these two, Ch.IX.

Equality and Inequality, that we are to look for that Property, by which this Genus is distinguished. It is from QUANTITY ONLY that things are denominated EQUAL or UNEQUAL (0).

FARTHER still—Whatever is Equal, is equal to fomething else; and thus is Equality a Relative Term. Again, if we resolve Inequality into it's several Excesses and Desects, it will be apparent that each of these is a Relative Term also. 'Tis with reference to Little that Great is called Great; with reference to Few, that

by Aristotle.—Ταυτά μὲν γὰς, ὧν μία ἡ ἐσία· ὅμοια δ', ὧν ἡ ϖοιότης μία· ἔσα δὲ, ὧν τὸ ϖοσὸν ἕν.—
Things are the same, of which the Substance is one;
similar, of which the Quality is one; Equal, of which the Quantity is one. Metaph. Δ. κεφ. ιέ.
p. 88. Edit. Sylb.

^{(0) —} ίδιου δε μάλιςα τε ωοσε, το ίσου τε κ) άνισου λέγεσθαι— Arift. Præd. p. 34.

Ch.IX. Many are called Many; and 'tis by the fame habitudes inverted exist Little and Few. And thus is it that, thro' the Property here mentioned, the Attribute of QUANTITY passes insensibly into that of RELATION (p); a fact not unufual in other Attributes as well as these, from the universal Sympathy and Congeniality of Nature.

> NAY fo merely relative are many of these Excesses and Defects, that the same subject, from it's different Relations, may be found susceptible of both at once. The Mountain, which by it's Relation to the Mole-hill, was great; by it's Relation to the Earth, is little: and the Herd, which were many by their Relation to

the

⁽p) Aristotle says expresly of the Things here mentioned, that no one of them is Quantity, but exists rather among the Tribe of Relatives, in as much as nothing is Great or Little of itself, but merely with reference to something else. Traw de aden is wood, αλλα μαλλου των ωρός τι, έδεν γαρ αὐτο καθ' αὐτό x. T. A. Arift. Præd. p. 33. Edit, Sylb.

the fingle Yoke, are few by their Relation to the Sands of the Sea-shoar (q).

And hence it appears that the Excesses and Defects, which belong to Quantity, are not of a relative Nature only, but of an indefinite one likewise. The truth of this will become still more evident, when it is remembered, that every Magnitude is infinitely divisible; and that every Multitude is infinitely augmentable.

WHAT then is to be done? How is it possible that fuch Attributes should become the Objects of Science? 'Tis then only we are said to know, when our Per-

⁽q) Aristotle's Instance goes farther, and shews how a smaller Number may be called Many; a larger Number be called Few.—ἐν μὲν τῆ κώμη πολλὰς ἀνθεώπες Φαμὲν εἶναι, ἐν ᾿Αθήναις δε ὀλίγες, πολλαπλασίες αὐτῶν ἔντας καλλῷ πλείες αὐτῶν ἔντας—We say there are MANY Men in a Village; and but few in Athens, tho' the Number in this last be many times larger; so too we say there are MANY Persons in a House, and but few in the Theatre, tho' the Number in this last may be many times more. Ibid.

Ch.IX.

ception is definite (r); fince whatever falls short of this, is not Knowlege, but Opinion. Can then the Knowlege be definite, when it's Object is indefinite? Is not this the same, as if we were to behold an Object as strait, which was in itself crooked; or an Object as quiescent, which was in itself moving? We may repeat therefore the question, and demand, what is to be done?—It may be answered as follows: Quantity Continuous is circumscribed by FIGURE, which, being the natural boundary both of the Superficies and the Solid, gives them the distinguishing Names of Triangle, Square, or Circle; of Pyramid, Cube, or Sphere, &c. By these Figures not only the Infinity of Magnitude is limited, but the means also are furnished for its most exact Mensuration. Again, the Infinity of Quantity Discrete is ascertained by NUM-BAR, the very Definition of which is TIAn-

¹⁴¹ has before, page 19, 20, 21, and Hermes,

for wor pieron, that is, Multitude circumferibed or defined. Thus, if, in deferibing a Battle, we are told that many of
the Enemy were flain, and but few
faved; our Knowlege (if it deferve the
name) is perfectly vague and indefinite.
But if these indefinite Multitudes are
defined by Number, and we are told that
the slain were a thousand, the saved a
hundred; in such Case our Knowlege becomes adequate and complete.

'Tis in the contemplation of these two Quantities thus defined, the Continuous by Figure, the Discrete by Number, that we behold them rendered subjects for the two noblest of Sciences, the first of them for Geometry, the second for Arithmetic (s); from which two (and not from mere Experiments, as some have hastily afferted) both the Knowlege of

⁽s) See Hermes, page 351, 352. 367.

Ch.IX. Nature, and the Utilities of common Life, are in the greatest part derived.

'Tis here we see the rise of those Mathematical Sciences, Arithmetic, Geometry, Music, &c. which the Ancients esteemed so essential to a liberal Education. Nor can we believe there is any one now, but must acknowlege, that a Mind properly tinged with fuch noble Speculations (supposing there be no want of Genius, or of Courage) is qualified to excel in every superior Scene of Life. Far more honourable they furely are, than the Arts of riding a Horse, or of wielding a Sword, those Accomplishments usually affigned to our Youth of Distinction, and for the fake of which alone they are often fent into distant Countries, as if there were nothing to be taught them at home, nor any thing in a Gentleman worth cultivating, but his Body. We would not undervalue these bodily Ac-

com-

complishments (for Perfection of every Ch.IX. fort is certainly worth aiming at); but we would wish them to be rated as much below the mental, as the Body itfelf is inferior to the Mind.

THERE is an elegant account of the Sciences abovementioned in the Republic of Plato. Glaucus (one of the Perfons in the Dialogue) takes pains to recommend them from their Usefulness in human life: Arithmetic for accounts and distributions; Geometry for incampments and mensurations; Music for solemn festivals in honour of the Gods; and Aftronomy for agriculture, for navigation, and the like. Socrates, on his part, denies not the truth of all this, but still infinuates, that they were capable of anfwering an end more sublime. "You " are pleasant, says he, in your seeming to " fear the multitude, lest you should be " thought to enjoin certain Sciences, that " are useless. 'Tis indeed no contemptible Ch.IX.

"matter, tho' a difficult one, to believe, that thro' these particular Sciences the Soul has an Organ purished and enlightened, which is destroyed and blinded by Studies of other kind; an Organ better worth faving than a thousand Eyes; in as much as TRUTH becomes visible thro' THIS ALONE (t).

THESE, that we have here mentioned, appear to be the only Species of Quantity; in as much as other things are called Quantities, not from themselves, but with reference to these. Thus we say that there is much White, because the Superficies,

⁽t) The above is an attempt to translate the following elegant Passage of Plato.— Ἡδὺς εἶ, ὅτι ἔοιμας δεδιότι τὰς ϖολλῶς, μὰ δοκῆς ἄχρηςα μαθήμαθα
ωρος άτθειν Τὸ δ' ἐςὶν ἐ ϖάνυ Φαῦλον, ἀλλὰ χαλεπὸν ωις εῦσαι, ὅτι ἐν τέτοις τοῖς μαθήμασιν ἑκας οῖς
ὅργανόν τι ψυχῆς ἐκκαθαίρε εἰαι, κὰ ἀναζωπυρε εῖται, ἀπολλύμενον κὰ τυΦλέμενον ὑπὸ τῶν ἄλλων ἐπιτηδευμάτων, κρε εῖτον ὅν σωθῆναι μυρίων ὁμμάτων μόνω γὰρ
αὐτῷ ᾿Αλήθεια ὁρᾶται. Plat. de Repub. lib. vii. p.
527. Edit. Serran. Hermes, 294, 5.

which it covers, is much; and that an Ch.IX. Action was long, because the Time was long, during which it was transacted. And hence it is, that, if any one is to explain the Quantity of an Action, as for example the length of the Trojan War, he explains it by the Time, saying it was a War of ten Years. So when we give the Quantity of any thing White, we define it by the Superficies, because, as that is in Quantity, so also is the White (u).

WE farther observe that Quantity Continuous and Discrete may be said to blend themselves with all things. Thus in Substances, let Mount Athos represent the former; the Army of Xerxes, the latter.

⁽u) Κυρίως δε Ποσὰ ταῦτα λέγε αι μόνα τὰ εἰρημένα, τὰ δε ἄλλα ωάντα κατὰ συμθεθηκός εἰς ταῦτα γὰρ ἀποθλέπου ες, κὰ τὰ ἄλλα Ποσὰ λέγομεν οἷον ωολὺ τὸ λεῦκον λέγεται, τῷγε τὴν ἐπιφάνειαν ωολλην εἶναι κὰ ἡ ωρᾶξις μακρὰ, τῷγε τὸν χρόνον, κ. τ. λ. Ariflot. Præd. p. 32. Edit. Sylb.

Ch.IX. In Colours, let us view the former in the uniform Blueness of a clear sky; the latter, in the many and diversified Tints of a Rainbow. In Sounds we find Quantity Discrete belonging to Speech or Language, it being the Essence of Articulation, that every Syllable should be di-Rind. The Continuous, on the contrary, naturally suggests itself to our Ears, when we hear Yellings, Howlings, and heavy Pfalmody. In Motions, when a Grafhopper moves by leaps, we behold Quantity discrete; when a Ship fails smoothly, we behold Quantity Continuous. The motion of all Animals, that have feet, (whether they leap or not) by being alternate, is of the discrete kind: but 'tis fabled of the Gods, that, when they moved as Gods, 'twas under one continued progresfion of their whole frame together; to which Virgil they fay alludes in speaking of Venus,

Et vera INCESSU patuit DEA— (x)

Ch.IX.

THE MIND, tho' devoid of Corporeal Extension, admits what is analogous to these two Species of Quantity, and recognizes their force even within the facred recesses of itself. For what can be more truly united in perfect Continuity, than the Terms which compose a Selfevident Truth? And how is this Continuity still farther extended, when by the Union of two fuch Truths there is produced a third, under the indisfoluble Connection of a Demonstrative Syllogism? If there was not this Syllogistic Continuity, there might indeed be other Continuities, but it would never be in our power to prove any thing concerning them. Again, when we consider either many Propositions, without reference to a Syllogism; or many independent Terms,

⁽x) Æn. I. 411.

Ch.IX. without reference to a Proposition; what have we then but Quantity discrete? PHI-LOSOPHICAL ARRANGEMENTS? Treafures, as capable of being number'd, estimated, and recorded, as those which the Miser commits to his coffers.

> 'Tis indeed by the help of an innate power of Distinction, that we recognize the Differences of things, as 'tis by a contrary power of Composition, that we recognize their Identities (y). These powers, in some degree, are common to all Minds; and as they are the Basis of our whole Knowlege (which is of necesfity either affirmative or negative) they may be faid to constitute what we call COMMON SENSE (2). On the contrary, to possess these Powers in a more eminent degree, fo as to be able to perceive

⁽y) See Hermes, p. 362, Note (f).

⁽²⁾ See Vol. I. Treatife the third, in the Notes, p. 287.

Identity in things widely different, and Ch.IX. Diversity in things nearly the same; this 'tis that constitutes what we call GENIUS, that Power divine, which thro' every fort of discipline renders the difference so conspicuous between one learner and another.

IT was from Speculations of this kind, that some of the Ancients were induced to consider QUANTITY in a far higher rank than is usual in common Specula-"tions. "They confidered both Species " under the common character of a BOUND or Measure, and as fuch to be con-" fpicuous throughout the whole Universe; the nature of the Continuous, " called MAGNITUDE, being feen in "Union and Connection; that of the " Discrete, called MULTITUDE, in Ac-"CUMULATION and JUXTAPOSITION; "that by virtue of Magn tude the WORLD or Universe was ONE; was extended s and connected every where thro' its " most

Ch.IX.

"most distant Parts;—that by virtue of " Multitude it was DIVERSIFIED WITH " THAT ORDER AND FAIR ARRANGE-" MENT, feen in the amazing variety of "Stars, of Elements, of Plants, of Ani-" mals; of Contrarieties on one fide, and " of Similarities on the other; -that if "these Quantities were thus distinguish-" able in the Copy or Image, (for fuch " was this World, when compared to it's " Archetype) much more so were they in "those pure and IMMATERIAL FORMS, " the invariable and immediate Objects of the Supreme Intellect. The "whole Production of Quantity (as of " every thing else) they referred with " reason to this Primary Intelligent Cause; "-whose virtual Efficacy, as far as it " passes thro' all things without dividing "itself or stopping, they supposed to " generate Continuity and Union; -" as far as it stops in it's progress at every " particular, and communicates to each "a peculiar Form of its own, they held

" to generate Distinction and Mul- Ch.IX.

"TITUDE;—and as far as it perpetually

exerts at once these two distinct and

" opposite Energies, they considered as for

" ever rendering the Universe both

"MANY and ONE; MANY, thro' it's

" Order and fair Variety; One, thro' it's

" Connection and general Sympathy." (a)

AND

(a) The Authors, from whom the preceding Sentiments are taken, are *Plotinus* and *Jamblichus*, in the Commentary of *Simplicius* upon this Predicament of *Quantity*.

"Ετι δε ό Πλωτίνω — ίδια γαρ η φύσις έκαςω, ως η εν τῷ ωαντὶ κόσμω θεωρείται, τε μεν συνεχες ή φύσις, ήτις καλείται μέγεθω, κατα ένωσιν η άλληλεχίαν τε δε διωρισμένε, ήτις καλείται ωλήθω, κατα σώρειαν η ωαράθεσιν η γαρ κατα μεν την τε μεγέθες εσίαν, είς ό κόσμω ές τε η νοείται, σφαιρικός η συμπεφυκώς έαυτῷ, διατεταμένω τε η άλληλεχέμενω κατα δε τὸ ωλήθω, ήτε σύνταξις η ή διακόσμησις, ή έκ τοσωνδε φέρε εἰπείν σοιχείων, η ζώων η φυτών θεωρείται, η ἐναντιωτήτων ή ὁμοιοτήτων τόσων η τόσως εἰ εν ἐν ταῖς εἰκόσιν ετω ταῦτα κεχώρισαι, πολύ ωρότερον ἐν τοῖς νοεμένοις γένεσι η ωρὸ τέτων,

Ch.IX.

AND so much for the third UNIVER-SAL GENUS, or PREDICAMENT, that of QUANTITY, it's various Species, and it's peculiar Properties (b).

έν τοῖς καθ' αὐτὰ ἀὐλοις εἰδεσι διές ηκε, κοινον ἔχονλα, ώς εἴρηλαι, το μέτρον κὰ το ωέρας. Simplic. in Præd. p. 32. B. Edit. Bafil. 1551.

Ο δε θείω Ίαμελιχω επειδή γαρ ή τε ενός δύναμις, αφ' ε παν το ποσον απογενναται, διατείνεται δι όλων ή αὐτή, κ ορίζει εκαςον προϊέσα αφ' εαυτής, ή μεν δι όλων διήκει παντάπασιν αδιαιρέτως, το συνεχες υφίςησι, κ ή την προσοδον ποιείται μίαν, κ αδιαίρετον κ άνευ διωρισμέ. ή κ ποροϊέσα ίς αται καθ' έκαςον των είδων, κ ή ορίζει έκαςον, κ έκαςον εν ποιεί, ταυτή το διωρισμένον παράγει. Επεί δε άμα κ μένει κ πρόεισι, τα δύο απογεννά. περιέχει γαρ ή των νοητων μέτρων δύναμις άμα αμφότερα τα μένοντα κ προίοντα εν ενὶ τῷ αὐτῷ. Simplic. in Prad. p. 34. Edit. Bafil. 1551.

As the above Sentiments are expressed in the Text, a verbal Translation of them is omitted. It may however be acceptable to the curious to see them in their Originals, and for that reason they have been subjoined.

(b) See before Note (o) of this Chapter, p. 190.

WE cannot however quit this and the Ch.IX. preceding Predicament (I mean the Predicaments of Quality and Quantity) without observing that, as they are diffused in a conspicuous manner throughout the Universe, so Writers both sacred and profane, both poetic and profaic, appear to have expressed their force, and that often at the same time, as the Predicaments themselves often exist so in nature.

O! Lord, how MANIFOLD are thy Works? In Wisdom hast thou made them all (c).

HERE [manifold] denotes the Quantity of the Divine Works; [made in Wisdom] denotes their Quality.

Quinctilian-Nam et QUALIS in cujusque rei naturâ, et quæ forma, quæritur:

⁽c) Pfalm civ. v. 24.

Ch.IX. an immortalis anima, an humanâ Specie

Deus: et de MAGNITUDINE et NUMERO:
quantus, Sol; an unus, Mundus (d).

WHERE the Critic not only delineates the two great *Predicaments* here mentioned, but divides also *Quantity* into it's two capital Species, I mean *Magnitude* and *Number*.

CICERO goes farther in his Tusculan Disputations, not only producing QUA-LITY and QUANTITY, but SUBSTANCE also, their support; which he places first, according to it's proper order. Si QUID sit hoc, non vides; at QUALE sit, vides: si ne id quidem; at QUANTUM sit, profestò vides (e).

Even comic writers have expressed the force of these two Predicaments.

⁽d) Instit. Orat. 1. vii. c. 4.

⁽e) Tusc. Disp. 1. i. 25.

QUANTAM et quam VERAM laudem capiet Ch.IX.

Parmeno (f)?

How GREAT, and how TRUE praise will Parmeno acquire?

Great indicates QUANTITY; True indicates QUALITY; for what QUALITY in praise is more valuable, than Truth?

THE Poets, who dealt in Subjects more exalted than Comedy, appear many of them to have employed the fame Language.

THUS Tibullus, speaking of Bacchus-

-QUALIS QUANTUSQUE minetur (g).

Ovid, of Jupiter-

⁽f) Terent. Eunuch. v. 4. 3.

⁽g) Tibul. 1. iii. Eleg. vi. v. 23.

Ch.IX. —QUANTUSQUE et QUALIS ab altâ

Junone excipitur—— (h)

VIRGIL, of Venus-

—— QUALISQUE videri Cælicolis, et QUANTA folet—— (i)

THE fame, of POLYPHEME—

- QUALIS, QUANTUSQUE cavo Polyphemus in antro (k).

Homer (whom 'tis probable the rest all copied) speaking of Achilles—

[™]Ητοι Δαρδανίδης Πρίαμ⊕ θαύμαζ' 'Αχιλῆα, ΟΣΣΟΣ ἔην, ΟΙΟΣ τε· θεοῖσι γὰρ ἄνλα ἐώκει (l).

Nor less the royal Guest the Hero eyes, His godlike aspect, and majestic size (m).

⁽b) Metam. iii. 204.

⁽i) Æn. ii. 589.

⁽k) Æn. v. 641.

⁽¹⁾ Iliad. xxiv. 629.

⁽m) Pope's Homer, B. xxiv. v. 798. The Translation we see renders the words or and of by a Peri-

THESE Attributes, given by Poets to Ch.IX. Gods and Heroes, have been found by Euclid in Figures Geometrical. He has a Problem, to teach us how to describe a rectilineal Figure, which to one given rectilineal Figure shall be SIMILAR, to another shall be Equal (n).

SIMILAR is a Property of QUALITY; EQUAL, of QUANTITY (0).

But 'tis time to finish, and proceed to the Arrangement next in order.

Periphrasis, and it should seem with some propriety, as the God-like aspect of Achilles is clearly among his Qualities, and his Majestic Size evidently respects his Magnitude, that is to fay, his Quantity. It must be confessed however, that much of the force of the Original will necessarily be lost in the Translation, where fingle words in one Language cannot be found corresponding to fingle words in the other.

- (n) Euclid vi. 25.
- (o) See before page 175, and page 191.

CHAP. X.

Concerning Relatives (a)—their Source—Relatives apparent—real—their Properties, reciprocal—Inference, and Coexistence—Force of Relation in Ethics—in matters Dramatic—in Nature, and the Order of Being—Relations, amicable and hostile—Evil—Want—Friendship—Strife—Relation of all to the Supreme Cause—extent and use of this Predicament, or Arrangement.

Ch. X. Predicaments, or Arrangements already described, subordinate Beings may be said to attain their Completion; thro' Substance

⁽a) The Title of this ARRANGEMENT is expressed by a Plural, and not a fingular (like Quality and Quantity) because all Relation is necessarily between Two.

Substance they exist; thro' Quality they Ch. X. are distinguished; and thro' Quantity they acquire a Magnitude, and become a certain Multitude.

YET when Beings are thus produced, we must not imagine them to exist, like Pebbles upon the Shoar, dispersed and scattered, without Dependence or mutual Sympathy. 'Twould be difficult out of such to compose a Universe or persect Whole, because every persect Whole has a respect to it's Parts, as well as the Parts a respect both to such Whole, and to each other. Hence then the rise of that Genus called Relation, a Genus, which runs thro' all things, holding all of

Two.— n de Σχέσις τοὐλάχιςον ἐν δυσὶ ωράγμασι Θεωρεϊται. Ammon. in Cat. p. 94. B.— ίδιον γὰρ τῆς χέσεως μόνης, τὸ ἐν ωολλοῖς ὑΦες άναι μόνως, ὅπερ ἐδεμιᾶ ωρόσεςι τῶν ἄλλων καὶ ηγοριῶν.— 'Tis a Peculiarity of Relation only, to have it's existence in MANY, which is the case with no one else of the Predicaments. Simpl. in Præd. p. 41. B. Edit. Basil. 1551.

Ch. X. them together, in as much as there is no Member of the Universe either so great or so minute, that it can be called independent, and detached from the rest.

> Now in all RELATION there must be a Subject whence it commences, for example Snow; another, where it terminates, for example a Swan; the Relation itself, for example Similitude; and lastly the Source of that Relation, for example Whiteness (b); the Swan is related to Snow, by being both of them White.

> > THE

⁽b) This Source may be fought for among the Differential Characters of Being, in whatever Predicament or Arrangement they happen to exist, be it in Quality, as the Character of Whiter; in Quantity, as that of Greater, that of more Numerous; in Time, as that of Older; in Place, as that of Upper, &c.

This is what Simplicius means, when he favsανάγκη αὐτην (scil. την χέσιν) έν τῷ κατὰ διαΦοράν χαρακτήρι ευυπάρχειν. Simpl. in Cat.

Hence too we may fee why RELATION stands next to Quantity; for in strictness the Predicaments which follow are but different Modes of Relation, marked by fome

THE Requisites to Relation being in Ch. X. this manner explained, it will appear that those only are the true Relatives, which express in their very Structure the relative Source, and whose very Essence may be found in this their reciprocal Habitude (c). But this perhaps will be better understood by a few examples.

THE

fome peculiar Character of their own, over and above the relative Character, which is common to them all.

Even in the two Predicaments that precede this of Relatives, I mean QUALITY and QUANTITY, tho' they have an existence void of Relation, we cannot say so of their characteristic Peculiarities; for LIKE is a Relative Term, and so is EQUAL. Hence Simplicius—αλλο γας το ίσου παςα το ποσού, κ αλλο το υμοιου παςα το ποιόυ—ΕQUAL is something else beside QUANTITY; LIKE, something else beside QUALITY. Simpl. in Præd. By something else he means they are Relatives.

(c) Πρός τι τὰ τοιαὖτα λέγεται, ὅσα, αὐτὰ ἀπερ ἐςὶν, ἐτέρων εἶναι λέγελαι ἢ ὁπωσεν ἄλλως ωρὸς ἔτερον.

—Such things as these are said to be RELATIVES, namely as many as are said το BE, WHAT THEY ARE,

York, a Lemon equal to an Orange, &c.

Ch. X. THE Swan ('twas faid before) was in Whiteness like Snow. Here the Swan and the Snow were produced, as Relatives. We produce others of like kind, when we affert that London is larger than

But the truth is, these Subjects are none of them properly Relatives of them-selves, but then only become such (as indeed may every thing else) when a Relation is raised between them through the Medium of a Relative Attribute. London, we say, is larger than York. The Relation subsists in Larger, which being attributed to London, makes it a Relative to York, which is in fact something less. The same holds in the Lemon and Orange, and in all possible instances. To whatever Subject we assort

by being THINGS BELONGING TO OTHER THINGS, or which in any other sense have reference to something esse. Arist. Præd. p. 34. Edit. Sylb.

ciate any of the Relative Attributes, we Ch. X. immediately render the Subject by fuch Affociation a Relative. Such a Subject therefore is only a Relative incidentally.

But the true and real Relatives are those Attributes themselves, the Terms Larger, Equal, Like, &c. for these in their very Structure express the relative Source, and only exist in a joint and reciprocal Habitude one to another.

THERE are also relative Substances, as well as relative Attributes; that is to fay, Terms which indicate at once both a Substance and a Relative. Such are Master and Servant, Preceptor and Disciple: Master implies a Man; and not only that, but a Man having Dominion: Servant implies a Man, and not only that, but a Man rendering Service; and the fame may be faid of the other example alleged.

Ch. X.

Now a distinguishing PROPERTY of these real Relatives, is, that they reciprocate in their Predication (d). Every Master is the Master of a Servant, and every Servant the Servant of a Master: every Preceptor the Preceptor of a Disciple; and every Disciple, the Disciple of a Preceptor. The same holds in the relative Attributes as well as in the Substances, Greater being always Greater than Lefs, and Lefs being always Lefs than Greater. That this is a Property, which never fails, will better appear, if from any relative Substance we subtract the relative Attribute, and substitute in it's room the Substance alone. For example, from the relative Substance, Master, let us subtract the relative Attribute. Dominion, so that Man only shall remain, divested of that Attribute. We

⁽d) Πάντα δὲ τὰ ωρός τι ωρὸς ἀντιςρέφοντα λέγεται. Arift. Præd. p. 35.

cannot affirm of every Man, as we can Ch. X. of every Master, that merely as a Man, he is the Master of a Servant (e).

From this necessity of reciprocal Predication, another Property of Relation follows, that we cannot understand one Relative, without understanding it's companion; and that in proportion as our Knowlege of one Relative is more precise, so is that likewise of the other (f). I cannot know

⁽e) Aristotle finds an instance in the same Term, Servant.—οιον ο δελω, εάν μη δεσπότε άποδοθη δελω, άλλα άνθεωπε, η δίποδω, η ότεξεν των τοιέτων, έκ άντιςρέΦει ε γας οικεία η άποδοσίς ές των—For example, the Term Servant, if he be not described as the Servant of a Master, but of a Man, or of a Biped, or of any other such thing, does not reciprocate, because the Description returned is not necessary and essential—that is, we cannot say, the Man of a Servant, or the Biped of a Servant, as we say the Master of a Servant. Arist. Præd. p. 37, where much more is subjoined, worth reading.

⁽f) Relata sunt simul COGNITIONE. Cognito proinde alterutro, cognoscitur alterum; (idque EODEM plane MODO

Ch. X. know for example that A is greater than B, without knowing that B is less than A; and if with more precision I know that A is double, I necessarily know withal that B is half; and if with still farther precision I know the measure of A to be eight, I know with equal precision the measure of B to be four (g).

AND

MODO, et MENSURA COGNITIONIS) et ignorato ignoratur. Logic. Compend. Saunderson, p. 41. Edit. Oxon. 1672.

I have quoted Saunderson, as he was an accurate Logician, but Aristotle's own words are, as followsέαν τις είδη τι ωρισμένως των ωρός τι, κακείνο, ωρός δ λέγεται, ώρισμένως είσεται—If any one know with precision any one of two Relatives, he will know also the other Relative which it refers to, with equal precision. Arift. Prædic. p. 39. Edit. Sylb.

(g) And here by the way it is worth observing, that as all Relatives are recognized in combination, while every Object of Sense is perceived distinct and independent; it follows that all Relatives are properly Objects of the Intellect, and that, if it were not for this faculty, we should know nothing concerning them. Let A for example be supposed the master of B, and let A be tall, well-proportioned, ruddy, &c. These last

And this naturally leads to that fun- Ch. X. damental Property of Relation, on which the rest all depend, namely, the necessary and universal Co-existence of Relatives (h), which always commence together, fubfist together, and cease together. Ulysses, in his Speech to Thersites, says in anger,

last characters only are visible to the Eye, nor does the Eye see more, while the Relation subsists, or less, when the Servant dies, and the Relation is at an end. Were there a change in the Master's person, were he to become deformed from being well-shaped, or pale from being ruddy, then would the Eye be able to recognize what had happened. But 'tis a fingular property of this Genus, that a Relative may change, or lose it's Relations, without change or loss within itself. Let the corresponding Relative but vary, or cease to exist; let the Master lose his Servant, or the Preceptor his Disciple; let those, who stood on my right remove themselves to my left, or those, who flood above me, place themselves below; and 'tis easy to conceive a Subject, after having lost or varied every one of these Relations, still to remain itself invariably the fame.

^{· (}b) Δοκεί δε τα ωρός τι άμα τη Φύσει είναι-Arift. Prad. p. 37.

Ch. X. May I lose my son Telemachus, if I do not seize, &c. And how does he express this fentiment?

Μηδέτε Τηλεμάχοιο σατήρ κεκλημέν 🕒 έίην.

May I no longer be called THE FATHER OF TELEMACHUS (i).

He well knew he could only lose that Relative Denomination, by losing his Son, with whose birth and duration it was indisfolubly connected. It was not that Ulysses might not have survived Telemachus, or Telemachus, Ulysses; the Co-existence being only attached to the Relative Characters, those of Father and Son.

And hence we may collect that the Co-existence here mentioned is not like that of Substance and it's essential Pro-

⁽i) Iliad, B. v. 260.

perties (as Rationality for example co-Ch. X. exists with Man, or Sensation with Animal); but a Co-existence less intimate by far than that is, because it subsists between Beings actually distinct one from another.

And hence it has followed, that some Logicians have treated it as possessing less of the *real*, than any one of the other Genera. They tell us, *Relatio est* Ens minimæ Entitatis (k).

YET we must be careful how we undervalue it (1), in consequence of such a notion;

⁽k) Fell's Logic, p. 92.

⁽¹⁾ Thus Simplicius in his Comment on this Categoric—Διὰ ταῦτα δὲ, ὡς ωαραφυομένην ταῖς ἄλλαις κατηγορίαις, την τὰ ωρός τι ἐπεισοδιώδη νομίζεσι καί τοι ωροηγεμένην ἔσαν, κὰ κατὰ διαφορὰν οἰκείαν Θεωρεμένην. Αῦτη γὰρ κοινότης ἐςὶ διὰ ωάντων διήκεσα, τῶντε ἐναντίων, κὰ τῶν ὁποσᾶν διαφερόντων, κὰ τῶν ὁλων γενῶν, κὰ τῶν ὑπ' αὐτὰ τεταγμένων ἤτις εἰ μὴ ωαρῆν,

Ch. X. notion; fince with those, who well attend to it's amazing efficacy, it is more likely

ΤΟΝ, διωπάσθη αν πάντη (l. πάντα) ἀπὸ πάντων — And hence some conceive the Predicament of Relation, by it's growing on as it were to the rest, to be something episodic and adventitious, altho it be in fact truly PRINCIPAL, and an Object of Contemplation from it's own distinctive Character. 'Tis this indeed is that Band of COMMUNITY WHICH PASSES THRO' ALL THINGS; thro' Contraries, thro' things in any way different, thro' whole Genera, and thro' the several Beings, arranged beneath them—that Principle, which, were we to suppose away, all things in that instant would be distincted and torn from all things. Simplic. in Prædic. p. 44. B. Edit. Basil. 1551.

See also the same Author in the same Comment.

Οὖτε γὰρ τὰ γένη, ἔτε τὰ ὑπ' αὐτῶν ὅντα, κοινω
θίαν ἔξει τινὰ ωρὸς ἄλληλα, εἰ μή τις χέσεως ἢ λό
γ ἐν τοῖς ἔσιν. ᾿Ατοπον δὲ τὴν κοινωνίαν ἀναιρεῖν τῶν

διαφερόντων ωρὸς ἄλληλα ἀτοπον δὲ κὴ τὴν άρμονίαν

ἀναίρειν, ἐ τὴν ἐν τοῖς Φθόγδοις μόνην, ἐδὲ τὴν ἐν τοῖς

ἀριθμοῖς, ἀλλὰ κὰ τὴν ἐν ταῖς ἐσίαις κὰ δυνάμεσι ωά
σαις κὰ ἐνεργείαις, ἤτις ἐγδινομένη τοῖς ἔσὶ, συνήγαδεν

εἰς ταυτὸν, κὰ χέσιν ἔχειν ωρὸς ἄλληλα ἀπειργάσαὸ «

ἀναιρεθήσεται δὲ κὰ τὸ σύμμετρου κὰ ἔσον, κὰ ἐπιςητὸν,

κὰ ἐπιςήμη. Εἰ δὲ κὰ γεωμετρία κὰ μασικὴ ωερὶ χέσεις

ἔχασιν, ἀνυπόςατοι δὲ αὐταί καταγέλαςοι ἀν εἶεν ἐκεῖ-

likely to acquire a rank perhaps above Ch. X. it's real merit.

WHAT ought we to think, should it appear the Basis of Morality?—" MORAE "DUTIES (says Epistetus) are in general

ναι ωερί τα ανυπίσαλα καλατοιβόμεναι. Πώς δε κή έΦετον φασιν ο θεος λέγεται, εί μηδεμία χέσις έςὶ φρός το εΦετου τω εΦιεμένω. - For neither the Universal Ges nera, nor the things included under them, can have any Connection one with another, if there exist not in things the Ratio of HABITUDE or RELATION. But 'tis ab furd to take away the Connection of things that differ one from another: absurd also to take away Harmony, not that only which exists in Sounds, nor that which exists in Numbers, but that also which exists in Substances, and in all the variety of Capacities and Energies; that, which having been implanted in Beings, has brought them together, and effected, that they should have the Relation here spoken of to each other. [Farther than this, by taking away Relation] there will be taken away the Proportionate, the Equal, the Knowable, and Knowlege. If Geometry and Music are employed about Relations, and these last have no Existence; then will those Sciences be ridiculous, in being employed about Non entities. How also can GOD himself be called AN OBJECT OF DESIRE TO ALL BEINGS, if there be no Relation between the Thing defired, and that which defires? Simplic. in Præd. p. 43. B.

Ch. X. " measured by RELATIONS. Is he a Fa-

"ther?—The Relation ordains, that he

" must be taken care of; that thou yield to

" him in all things, bear with him, when

" he reproaches, when he strikes, &c .-

"But he is a bad Father—And wert thou

"then by nature connected with a good

"Father?-No, but with a Father-

"Thus therefore out of Neighbour, out of

"Citizen, out of Magistrate wilt thou

"TRACE THE MORAL DUTY, if thou

" make it a Custom to CONTEMPLATE

"THE RELATIONS (m)."

THE Stoic Emperor Antoninus inculcates the same doctrine. There are (says he) three RELATIONS; one to the proximate Cause, which immediately surrounds us; one to the divine Cause, from which all things happen to all; and one to those, along with whom we live (n). So import-

⁽m) Epiel. Ench. cap. xxx.

⁽n) M. Ant. viii. 27.

ant is the Knowlege of Relations (ac- Ch. X. cording to these Philosophers) in a subject, which so much concerns us, I mean an upright and a virtuous conduct.

'Tis to a subordinate end, that Horace applies this Knowlege, when he makes it an effential to Dramatic Poets. and as a Philosophical Critic, teaches them, that 'tis thro' this Knowlege only they can truly delineate Characters. The verses are well known:

Qui didicit, patriæ quid debeat, &c.

'Tis thus too that Shakespeare, either by Knowlege acquired, or (what is more probable) by the dictates of an innate superior Genius (o), makes Macbeth shud-

⁽⁰⁾ The Author has in this place confidered Shakespeare, as Aristotle did Homer, and has left it uncertain, to what Cause his transcendent merit should be afcribed. Aristotle, speaking of Homer's superiority,

Ch. X. der at the thoughts of murdering Duncan, when he reflects on the many Duties he owed him, arifing from the many Relations he stood in, all of which Duties he was then basely going to violate.

---- He's here in double trust;

First, as I am his KINSMAN, and his Subject,

Strong both against the deed: then, as his Host,

Who should against his Murtherer shut the door,

Not bear the Knife myself-

AND here I cannot help remarking upon this excellent Tragedy, that it is not only admirable as a *Poem*, but is perhaps at the same time one of the most *moral* pieces existing. It teaches

fays in like manner, that it was, ήτοι διὰ τέχνην, ħ διὰ Φύσιν, either thro' Art, or thro' Nature. Vid. Arift. Poet. c. viii.

us the danger of venturing, tho' but for Ch. X. once, upon a capital offence, by shewing us that 'tis impossible to be wicked by halves; that we cannot stop; that we are in a manner compelled to proceed; and yet that, be the fuccess as it may, we are sure in the event to become wretched and unhappy (p).

But to return to our Subject, I mean that of Relation.

IF we quit Mankind, and view it's more general extent, we shall find, that, where Continuity fails, there RELATION supplies it's office, connecting as it were all things the most remote and heterogeneous. Were they indeed combined under an Union more intimate, were it the same with that Continuity, seen in a living Body and it's Limbs, the whole Uni-

⁽p) See the Remarks on this Tragedy in that elegant Book, the Essay on the Writings and Genius of Shakespeare.

Ch. X. verse would be no more than one immense Animal. But 'tis not so: and those, who have explained it's Nature, have rather called it one City, or one Commonwealth (q); a very different Species of Monad from one Animal, or living Being. 'Tis here then (as we have said) Relation intervenes, and under a thousand different ties connects all things together.

THE ties indeed are many, tho' the Sources are few. Every fubordinate Being, as it is by nature fubject to wants, (indigence and imperfection being effential to it's conftitution) has a connection with those Beings, thro' whom fuch wants may be fupplied. Hence then one Source of Relation. Again, every Being whatever, that has power to supply such wants, has a Connection with those Beings, to whom it can thus become subservient. Hence

⁽⁴⁾ See Vol. First, Treatise the third, p. 225, 341.

then another Source of Relation. Now Ch. X. in the Divine Oeconomy of the whole it is so admirably contrived, that every Being in different degrees possesses this double character, and not only needs afsistance, but is able in it's turn to afford it. Nothing is so mighty, as to subsist without help; nothing so minute, as not at times to have it's use. Thus as Connections reciprocate, and are every where blended, the Concatenation of Relations grows in sact universal, and the world becomes (as above described) one City or Commonwealth.

Instances of this double Relation occur (as we have faid) in every particular Being. The Ewe is related to the Grass, as to the Being which supplies her wants; to her Lamb, as to the Being whose wants she herself supplies. The Grass again is related to the Earth, as to the Being, which affords it aliment; while it is related to the Ewe, by be-

Ch. X. coming itself aliment to her. The Earth is related to Vegetables, as she is both their parent and their nurse; while she is related to the Sun, as to the fountain of her genial warmth. The Relations of the Sun are finely represented by Epictetus, who makes THE SOVEREIGN OF THE UNIVERSE thus address that noble Luminary. "Thou (faith he) art SUN: " Thou art able by going round, to form " the year and the Seasons; to enlarge and so nourish the fruits; to raise and still the f: Winds; to warm in due degree the bo-" dies of men: Arise, go round, and be-" ginning from the greatest, extend after so this manner thy influence to the most mi-46 nute (r)."

> Nor when we mention the Earth ought we to forget that equitable discharge of her Relations, for which Virgil well distinguishes her by the character of most Just;

⁽r) Arrian. Epiet. 1. iii. c. xxiv. p. 444. Edit. Upton. Συ ήλι τί δύνασαι, κ. τ. λ.

Fundit humo facilem victum Justissima Ch. X.

THE Attic Historian and Philosopher will be found the best Commentator on this elegant passage of the Roman Poet. "The Earth too (says Xenophon) besting a Divinity, teacheth those that can selearn it of her, Justice: for such as cultivate her best, she requiteth with most goods (t)",

WHEN we view the Relation of the Male to the Female, and of the Female to the Male, and add to this the Common Relation extending from both to their Offspring, we view the rife of Families thro' the whole animal race. Among

⁽s) Virg. Georg. ii. 460.

⁽t) Έτι δε ή ΓΗ, θεδς έσα, τες δυναμένες καταμανθάνειν, κ ΔΙΚΑΙΟΣΥΝΗΝ διδάσκει τες γας α-ρισα θεραπεύουθας αὐτην, ωλείςα αγαθα ἀντιποιεί Χεπορh. Occonom. p. 35. Edit. Oxon.

Ch. X.

the more focial, fuch as Sheep and Cattle, these Families by fresh Relations are combined into larger multitudes, under the name of Flocks and Herds. Among those of higher order still (such as the Bee (u), the Ant, the Beaver, and above all the social and rational Being, Man) these herds and slocks by relations more excellent are improved into civil Polities, where there is a general Interest or common Good, a Good to which either willingly or unwillingly (x) every individual co-operates.

⁽u) Virgil speaks of the Bee, as he would of Man; Mores et studia et populos et prælia dicam. Georg. iv.

Aristotle, distinguishing these Animals from those, which do no more than barely herd together, elegantly calls them ζῶα ωολιτικά, Political or Civil Animals, Animals formed for a Life of Civil association, where the Business is one, and that common to the whole Tribe; ὧν εν τι, κ. τ. λ. Histor. Anim. p. 5. Edit. Sylb.

⁽x) ——— ἢν δὲ μη Θέλω,
Κακὸς γενόμεν۞, ἐδὲν ἦτλον ἔψομαι.
Ερίει. Enchirid. c. lii.

See Vol. I. Treatife the third, p. 235, 349.

If we descend below Animals down to Vegetables, we shall discover in the Vine, the Ivy, the Woodbind, and all the Plants of slender Stalk, a manifest relation to those of a trunk more solid, such as the Oak, the Elm, and the several trees of the Forest. 'Tis with a Power, which appears almost a conscious one, that the former of these tribes, recognizing their Relation, apply to the latter for a support, and spontaneously twine their bodies, or at least their tendrils, around them (y).

WHEN

⁽γ) Τὰ τέλη, ἐφ' ὰ τῶν Φύσει γιθνομένων ΕΚΑΣΤΑ
ξεται, ἐ κὰ τὴν ἀρχὴν εὐθὺς Φυομένοις πάρες τν αὐτοῖς,
ἀλλ' ὕςατα δήπε παραγίγνεται. Σκοπῶμεν δ' αὐτὸ
ἐφ' ἐνὸς τεθε' τῷ ἀμπέλε ἔλικι τέλω ἐςὶ, τὸ ἐτέρε
Φυτε πορθῷ περιελιχθεῖσαν, ἐκείνω τὴν ἄμπελον ἀναδῆσαι τῷ Φυτῷ, ταύτην ἐν τοῖς Φυτοῖς τὴν Φύσιν εἰληχυίαν, ἐπαλλόκαυλον εἶναι. Οὐκεν τὸ ἑτέρε Φυτε πορθῷ τὴν ἔλικα περιελιχθεῖσαν ἀναδῆσαι τὴν ἄμπελον, ἔτε
τῆ ἀμπέλω Φυομένη, ἔτε τῷ ἔλικι εὐθὺς πάρες τὸ, ἀλλ'
ἤςατόν γε παραγίγνε αὐ ἐδὲν μέντοι ἦτον τὰ Φύ-

Ch. X.

WHEN therefore we contemplate the various Relations already hinted, and mark

in

εσθαι όλως έλικα τη αμπέλω αἴτιου τελικου ή εφ' ετέρω φυτῷ ἀνάδεσις αὐτῆς ἐςιν. 'Αμήχανου δὲ τὸ μηδέπω ου, μηδ' ἐν τοῖς ἔσι τεΓαγμένου, ὄντῷ τε ἤδη αἴτιου γίγτεσθαι 'εἴναι γὰρ δεῖ τὸ αἴτιου τε γινομένε, ἐχὶ μη εἴναι. Προειλῆφθαι ἄρα δεῖ ἔν τινι νῷ την τῆς ἀμπέλε ἐφ' ἐτέρω φυτῷ ἀνάδεσιν, ὁς αὐτῆ ἐπιςατῶν, ὥσπερ δημιεργὸς ἀνηρ σκευαςοῖς, κὰ την ἔλικα αὐτῆ τῆς τοιαύτης ενεκα ἀναδέσεως φύσει 'η κὰ βαυμασίως, ἐαν μὲν μηδέν τι αὐτῆ τοιετον παρακέηται οῖω περιελιχθῆναι, ἐπ' εὐθύ πως φαίνελαι Φερομένη 'ἐαν δὲ πλορθός τις παρῆ, εὐθύς περιειλιχθῆ. Οὐτ ἔν την ἔλικα τῆ ἀμπέλω μη ἐ τέτε ἔνεκα φύεσθαι, ὅπως ἐτέρω αὐτὴν φυτῷ ἀναδήση, νεν ἔχει μὴ ἀξιεν' ἔτε τὸ μὴ νεν τοῖς τοιέτοις ἐφιςάναι ἔχοι ᾶν κὰ ὀντινεν λόγου.

The ENDS, to which the several vegetable Productions tend, are not instantly present to them, as soon as they begin to grow, but some way or other accrue to them subsequently. We may perceive this in a single instance. The End to the Vine's Tendril, is, by twining round the Branch of another Vegetable, to bind the Vine to that Vegetable; which Vine, among the vegetable Tribe, possesses this natural Character, that it should rest upon another for it's support. Now that the Tendril, by twining round the Branch of another Vegetable, should bind the Vine on, neither belongs to the Vine, when it sins begins

in how friendly a manner they bring the Ch. X. most distant Beings together, we may

be

to grow, nor yet to it's Tendril; but is something which accrues subsequently: and yet nevertheless, the binding of it to another Vegetable is the FINAL CAUSE why the Tendril should grow at all, and belong to the Vine. But it is impossible that what AS YET IS NOT, and bas no Arrangement in the order of things, (I mean the binding) SHOULD BE THE CAUSE OF SOMETHING WHICH NOW IS, (I mean the Tendril of the Vine, when it first appears). The Cause of any thing produced must have an actual Existence, and not be a nonentity. This Binding therefore of the Vine to some other Vegetable must have been PRECONCEIVED IN SOME MIND OR INTELLECT, who presiding over it (as any Man, being an Artist, presides over his Works) makes the Tendril grow to it for the Sake of Such Binding : which Tendril also wonderfully, if there be nothing adjoining of a nature for it to twine round, appears in some fort to shoot upwards; but if any Branch be near, instantly deviates and twines round it. It is therefore irrational to suppose that the Tendril did not grow to the Vine, that it might hereafter bind it to another Vegetable; nor can there be any degree of Reason for asferting, that some MIND or INTELLIGENCE did not preside over such Operations.

The force of this Argument is, as follows-THINGS exist before their ENDS; that is, before that the Ends of their Existence take place. The Tendril exists, before it binds the Vine; the Minute-hand exists, Ch. X. be tempted to fay with the Philosopher;

that "all things are full of FRIENDLY
"PRIN-

exists, before it indicates the Minutes. And yet is this Binding, and this Indicating so necessary, that the Things themselves would never have existed, but for the sake of these only. Where then were these Ends, when the Things themselves first appeared?—In external and visible nature?—This from the Hypothesis is impossible, for the Hypothesis makes them subsequent.—No other place then remains, but either the Sovereign Mind, or a Mind subordinate, according as the Work itself is a Work of Nature of of Art. See before, p. 112, 113.

I have taken the preceding Extract from a Manufcript of that able Scholar and Philosopher George Gemistus, otherwise called Pletho, who flourished in the fifteenth Century, both before and after the taking of Constantinople. If it apply not immediately to the Subject, it has at least the merit of being something rare and ingenious. It is a morfel of that Controverly among the learned Greeks of this Period, whether the Preference in Philosophy was due to Plato or to Aristotle. Scholarius, among others, was for Aristotle; Pletho for Plato; from whose Work on this Subject (which was an Answer to Scholarius) this Extract is taken. There is another small Work of Pletho's upon the same Subject, intitled, Hepl & 'Αρις οτέλης προς Πλάτωνα διαφέρεται, printed at Paris, 1541; and Beffario (a learned Greek of that age, who went over to the Latin Church, and became a Cardinal)

"PRINCIPLES (2)". But we must Ch. X. not fuffer this fentiment to carry us too far. Things are not only full of FRIENDLY PRINCIPLES, but of HOSTILE likewife.

Cardinal) wrote a large Tract to defend the Platonic Doctrine, intitled Contra Calumniatorem Platonis. The printed Edition is in Latin, but the whole Work is extant in Greek among the Manuscripts of St. Marc's Library at Venice, to which Library Beffario bequeathed his own. There is too a fine Letter remaining of the same Bessario, addressed to Michael Apostolius, who, the' he took Bessario's fide, and defended Plato, yet appears to have done it, according to Bessario's Letter, with a zeal and bitterness not becoming him; a zeal and bitterness too frequent in Controversy, and (unfortunately for the Cause of Letters) no where more, than among learned men, and those in particular, whom we call Professors of Humanity.

The Epiftle above mentioned may be found in Greek and Latin, published by the learned Boivinus, in the fecond Tome of L'Histoire de l'Academie Royale des Inferiptions, &c. p. 455; and it is well worth perusal, for it's Temper and Elegance.

See also Cicero de Senectute, c. xv. Vitis quidem. &cc.

(z) Πάντα δε Φίλων μεςά. Arrian Epict. 1. iii. c. xxiv. p. 486. Edit. Upt.

Ch. X.

THE Fangs of the Lion are as much the work of Nature, as the tendrils of the Vine, or the nurturing Teats of the Ewe. To what then have these formidable weapons Relation; for Nature, we are assured, makes nothing in vain (a)? If to Offence, then is the Lion himself a source of hostile relation; if to Defence, then is he the object of injury from some other; so that hostility in either

⁽a) This was an axiom, inculcated every where by Aristotle; and more especially, when he is speaking of Final Causes, which, tho' now they make a small part of Philosophy, were never omitted by the Stagirite, as often as they could be introduced. His own words deserve attention-ή Φύσις εθεν ωοιεί μάτην, άλλ' αἐι ἐκ τῶν ἐνδεχομένων τῆ ἐσία ωερὶ ἕκαςου γέν 🕒 ζώε το αρισου-Nature makes nothing in VAIN, but with respect to each animal Genus, out of the several ways practicable she always makes that which is best. De Animal. Ingressu, p. 28. Edit. Sylb .- And again, in the same Tract-ή φύσις έθεν δημικργεί μάτην, ώσπερ είρηται ωρότερου, άλλα ωάντα ωρος το βέλτιου έκ των ένδεχομένων-NATURE CREATES NO-THING IN VAIN, but (as has been faid already) all things for the best, out of the several woys that are practicable. Ibid. p. 141. Edit. Sylb.

case is necessarily implied. Were it possible to doubt as to the offensive here, we
could never doubt as to the Structure
of the Spider's Web; a Structure clearly
taught her by Nature for offence alone.
These and the like Preparations, such as
the Boar's Tusk, the Eagle's Talons, the
Viper's Venom, &c. are all founded on
such wants, as can never be fatisfied amicably. The Wants therefore of this
character naturally rouse up similar Instincts, and thus the World becomes
stilled as well with HOSTILE RELATIONS,
as FRIENDLY.

Torva leæna lupum sequitur, lupus ipse capellam (b).

IT appears to have been these Relations of Hostility, that first gave rise to the phænomena of NATURAL and MORAL EVIL. Now whether REAL EVIL exist

⁽b) Virg. Ecl. ii.

at all, or whether we should confine it Ch. X. with the Stoics to Evil purely moral, are Questions beyond the Scope of this Treatife to examine. It will be fufficient to fay, that much Evil is imaginary, and founded merely on false opinion: that of the EVILS MORE REAL, there are many, which have their END, and so may be faid to partake ultimately the nature of Good. Many of the difficulties and distresses, which befal the human Species, conduce to fave it from Sloth, and to rouse it up to action; to action, which is in fact the very life of the Universe.

Haud facilem esse viam voluit, primusque per artem

Movit agros, curis acuens mortalia corda,

Nec torpere gravi passus sua regna veterno *.

^{*} Virg. Georg. I.

If there were no dangers, then could Ch. X. there be no Fortitude; if no Temptations, then no Temperance; if no adverse Accidents, nor Loss of what we love, then no submissive Resignation, no pious Acquiescence.

Οὐκ ἀν γενοῖτο χωςὶς ἐσθλὰ κὰ κακά· ᾿Αλλ᾽ ἔςι τις σύγκρασις, ὧς᾽ ἔχειν καλῶς.

Things Good and Ill can ne'er exist apart;

But fuch the MIXTURE, that they WELL accord (c).

AGAIN,

⁽c) The fine Distich here translated is from Euripides, quoted by Plutarch de Isid. et Osirid. p. 369. Edit. Xyland.

As to the Speculations here offered, and the Solutions suggested, we may well apply to them that just reflection of the Stagistite, tho used by him on a different occasion.

[&]quot;Ισως δε χαλεπου η σεςὶ των τοιέτων σφοδρώς απο-Φαίνεσθαι, μη σολλάκις επεσκεμμένου το μέντοι διη-R 2 πορηκέναι

Ch, X,

AGAIN, the Jaws of the Lion, the Poison of the Rattle Snake, the Sword of the Conqueror, and every Instrument of destruction, may be said incidentally to prepare the way for Generation; and that not only by making room for new Comers, but by furnishing fresh Materials towards their respective Production. For tho' the Theatre of the World fo far resembles other Theatres, that it is perpetually filled with Successions of new Spectators; yet has it this in peculiar, that the Spectators, which succeed here, are made out of those that went before. Every particular Birth, or natural production, appears an act, if not of hostility, at least of Separation; a Secession from the general Mass; a kind of

πορημένωι σερί επάς ε αὐτῶν, εκ ἀχρηςόν εςι.—Perhaps 'tis difficult to prove any thing clearly upon Subjects fuch as these, without having often considered and examined them. And yet to have thrown out doubts concerning them, is a thing, not altogether without it's use. Aristot. Præd. p. 40. Edit. Sylb.

revolt from the greater Bulk in favour of Ch. X. a finaller; which smaller would detach itself, and, were it able, be independent.

In a word as FRIENDSHIP, by cementing Multitude, produces Union; fo
STRIFE, by diffolving Union, produces
MULTITUDE; and 'tis by MULTITUDE
that the World becomes diversified and replenished.

And hence we may perceive the meaning of what Heraclitus fays in Plutarch, where he calls "WAR, the Father and "King and Lord of all things; and afferts, "that when Homer proyed

"That Strife be banished both from Gods and Men,

[&]quot; he was not aware that he was curfing

[&]quot; the Generation of all things; as in fact

[&]quot; they deduce their rife out of Contest and

[&]quot;Antipathy." The same Philosopher R 3 adds

Ch. X. adds immediately, "that THE SUN could "not pass his appointed bounds; that other-"wise, if he could,

Tongues he would find to patronize the Cause:

meaning by this mythological way of talking, that the Sun could not defert his Course, because so much depended on it; or otherwise, if he could, that being himself one of the primary Authors of Generation upon this Earth, and well knowing how much Strife co-operated in the same work, he would surely look out for an advocate (were such any where existing) to defend the cause of Strife against the Calumnies of Homer (d).

FROM

⁽d) Ἡράκλειτ۞ μὲν γὰς ἄντικρυς σόλεμον ὀνομάζει σατέρα ἢ βασιλέα ἢ κύριον σάντων ἢ τον μὲν "Ομηρον, εὐχόμενον,

[&]quot;Εκ τε θεων έριν, έκ τ' ανθρώπων απολέσθαι,

λαυθάνειν Φησὶ τῆ ωάντων γενέσει καταρώμενου, ἐκ μάχης

From all these Speculations one thing Ch. X. at least appears (whatever else may be doubtful)

μάχης κα αυτιπαθείας την γένεσιν έχοντων ήλιον δε μη ύπερβήσεσθαι τές σροσήκουτας όρες εί δε μη,

Γλώτλας μιν δίκης επικέρες έξευρήσειν.

Plutarch. de Isid. et Osir. p. 370. Edit. Xyland. Fol.

Dr. Squire, the late Bishop of St. David's, has given a fair Edition of this Tract in the original, to which he has subjoined an English Translation; but (according to a Practice too frequent with the best Critics) he has, in the Passage above quoted, attempted to mend, where no Emendation was wanting.

Chalcidius plainly alludes to the same Sentiment of Heraclitus in the following Extract from his Commentary on Plato's Timæus.-Proptereaque Numenius laudat Heraclium (lege Heraclitum) reprehendentem Homerum, qui optaverit interitum et vastitatem malis vitæ, quod non intelligeret mundum sibi deleri placere: si quidem Sylva, quæ malorum fons est, exterminaretur. Chal. p. 396. Edit. Meurf. 1617.

In the Greek Quotation, Homer is supposed to wish inadvertently against the Generation of all things; in the Latin, he wishes in the same inadvertent manner against the existence of Sylva, that is, of Matter. The difference is eafily reconciled, if we suppose Matter to be the Basis of Generation, and to be essentially R A requisite

Ch. X. doubtful) that Relations of Hostility, as well as Friendship, have their use in the Universe. Both also equally arise from Want on one side, and from the Power of removing it on the other (e). The difference is, that in friendly Relations the Help is communicated either with pleasure, as when the Mother fuckles her Child: or at least without pain, as when we shew a traveller his way. In hostile Relations, the Help, without regard to the Communicator, is either taken by force, as when the Wolf devours the Lamb: or obtained by stratagem, as when the Spider infnares the Fly.

requifite to the existence of things Generable and Pcrishable, out of which this lower and visible World is wholly composed.

⁽e) How far the WANT OF GOOD leads to Arts and Action, may be feen in Vol. I. Treatife the first, p. 24; and in the Notes subjoined, p. 272, 3, 4, 5. We here perceive it to extend not only to the whole animal World, but even to the Vegetable. More will be found on this Subject in the Treatife upon Motion, a part of the present Work.

AND thus by the reciprocal Relations Ch. X. of Want and Help (both of which under a variety of Forms exist in every individual) is there a kind of general Concatenation extended throughout the Universe; while each Being communicates what Help it can afford, and obtains in it's turn, that Help which it requires.

To all these Relations must be added that chief, tho' mentioned last, that of the whole Universe, and every Being in it, to the First, Supreme, and Intelligent Cause, thro' which Relation They are called His Offspring, and He Their Father. Here indeed the Relations are not blended as before; they are all purely referable to Want on one side, and all purely arise from spontaneous Help on the other; the correspondence existing, as far as Persect has respect to Impersect, Independent to Dependent, the Object desired

Ch. X. fired to the Beings which defire (f), the Maker to his Works, the Parent to his Children (g).

AND now to conclude with a Remark, which regards Relation in general. "As to every Continuous Being the Genus of QUALITY gives Distinctions, which help to mitigate it's Sameness, and render it as it were discrete; so to Beings discrete, however remote, the Genus of Relation gives a Connection, which ferves to mitigate their Diversity, and to render them as it were continuous.

⁽f) Πως δὲ κὰ ἐΦετον πῶσιν ὁ Θεὸς λέγεῖαι, εἰ μηδεμία γχέσις ἐςὶ πρὸς τὸ ἐΦετον τῷ ἐΦιεμένω— How is God called an Object desirable to all Beings, if there be no RELATION between the Object of Desire, and the Being which desires? Simplic. in Prædic. p. 43. B. Edit. Basil. 1551. See before, Note p. 225.

⁽g) St. Paul has given his Sanction to that Verse of Aratus—Τε γας κ γένω εσμέν—For we are his Off-spring. Arat. Phæn. v. 5. Acts xvii. 28.

"Thus is the World maintained as well " in it's Union, as in it's VARIETY,

"while both Species of Quantity run thro"

"the whole, and thro' every Part."

And so much for the ARRANGEMENT or GENUS OF RELATION, it's nature, it's properties, it's utility, and extent (h).

(b) Before we quit this Arrangement, we shall fubjoin the following Note.

The old Logicians held that Things Intelligible, and Intellection were Relatives; fo also Things Sensible, and Sensation. But then they started an objection-If Relatives co-exist, and always reciprocate in their existence, what would become of Euclid's Theorems, suppoling there were no Geometricians? What would become of Sensible Objects, supposing there were no Beings sensitive?

One Solution of this Objection is derived from the Percipient—The first original and supreme PERCIPIENT IS EVERY WHERE, AND ALWAYS IN THE FULL ENERGY OF UNIVERSAL PERCEPTION.

Another Solution is from the Objects perceived, be they fenfible or intelligible. Every fuch Object has a double nature; an absolute nature, and a relative one. The Sound A is an Octave to the Sound B. B ceases, and A continues. A is no longer an Octave, but still it is a Sound: and even tho' we should call it



no Sound, if there were to be no Hearers; it would still be an *Undulation* of Air, capable of producing Sound, if there were an Ear capable of perceiving it, that is, an Organ adequate to the Sensation.

The Instance given on this occasion by the Philos sophers Porphyry and Simplicius, is curious, because it is taken from that difficult System of Music, the Enharmonic. The following are the words of Simplicius—Κὰν γὰρ διὰ ράθυμίαν ἀποβάλωμεν ποτὲ τὴν τῶν ὅντων γνῶσιν, ἐδὲν ῆτον μένει τὰ ὄντα, ὅπερ ἐςὶ τὰ ἐπισπτά κὰ γὰρ ἐν τῆ μεσικῆ πρότερον μὲν κατηκέσμεν διέσεως, νῦν δὲ ἀνεπαίσθητοι τέτε τὰ διαςήματω ἐσμέν.—For if ever thro' any Sloth or Indolence we reject Knowlege, those things, which are intelligible, remain nevertheless. 'Tis thus that in Music we used in former days to hear the Quarter-Tone, but now we are unable to distinguish this interval. Simplic. in Præd. p. 48. B. Edit. Basil. 1551.

Porphyry, having told us that tho' there were no Geometry, considered as a Science, there would still be Objects Geometrical, subjoins—ἐπεὶ κ, ἐν τη μνσική το μεν τάλαι τε διεσιαίε διαςήματ 🕒 ήκεου οί μεσικοί, ύς ερου δε αμεληθείσης της ευαρμονίε μελωδίας, หล่ง ที่ม то อีเองเฉเือน อีเฉรานล อันอกเมอิยีเรื่อง หน้อรา ระ รอเέτε αἴσθησις έςαι (lege έςὶ) διαςήματ@ κ δήλον ότι έν τη Φύσει έςὶ το αίσθητου τέτο διάςημα, εί κλ ή αίσθησις εκλέλοιπεν. - For thus too in Music, Musicians used FORMERLY to hear (and distinguish) the Interval of the QUARTER-TONE: but in latter days, THE EN-HARMONIC MELODY having been neglected, by which this Interval used to be modulated, there is no longer now any Sensation of such an Interval: and yet 'tis evident that this sensible Interval has an Existence in nature, altha?

the for the present the Sensation of it be lost. Porphyr. in Prædic. p. 40. Ed. Paris. 1543.

Ch. X.

Porphyry flourished in the third Century; Simplicius in the sixth.

We may remark by the way from the above Quotations, how fast the Arts of Elegance were finking even in the more early of those two Periods.

As for the state of Philosophy in the latter Period, we may form a Judgment of it by what we learn from Simplicius in the same Treatise, with regard to the Stoics. Having in his Commentary on the Predicaments of Astion and Passion given many Quotations from the Stoic Logic, he concludes the Chapter with the following words—Πολλή δε ή τῶν τοιετων ἐξεργασία ωαρὰ τοῖς Στωϊνοῖς. ὧν ἐφ' ἡμῶν κỳ ἡ διδασκαλία, κỳ τὰ ωλεῖςα τῶν συγδραμμάτων ἐπιλέλοιπεν—There is much elaborate Discussion of these matters among the Stoics, of whom both the Doctrine and most of the Writings are in our times lost, and at an end. Simpl. in Præd. p. 84. B. Edit. Basil.

Mahomet soon followed, whose Successor Omar burnt the Alexandrine Library; nor did the succeeding Caliphs emerge from Barbarity, till the Race of the Abbassida, near two Centuries after.

The Barbarity of Western Europe continued much longer, and did not begin to lessen, till the sisteenth Century, that preceding the age of Leo the tenth.

C H A P. XI.

Concerning Action and Passion—Action, it's five Species—those of Passion reciprocate—Mind Divine, Human—latter, how acted upon—Politics, Oeconomics, Ethics—Passivity in Bodies animate, and inanimate—Action, and Reaction, where they exist, where not—Self-motion, what, and where—Power, whence and what—requisite both in Action and in Passion—Power, tho' like Non-Entity, yet widely different—Double in the reasoning Faculty—Power, not first in existence, but Energy, which never has ceased, or will cease, or can cease.

Ch.XI. In treating of Relatives we have confidered principally those, which possess the Relative Character in a degree above every other. But there are things, which,

which, as they possess it blended with Ch.XI. Characters more eminent, have been formed for that reason into separate Arrangements. Such for example is the Relation between a Being, and the Place, which it occupies; that between a Being, and the Time, while it exists; the first of which Relations gives an answer to the Question, Where; the latter, to the Question, When.

THERE are also Relations of Position; Relations of Habit; and besides these there are Relations of Action and Passion, all of which are distinguished by peculiar Attributes of their own, and have therefore merited distinct Examinations from the ancient Writers upon Logic.

Thus, if we consider the two last, I mean Action and Passion, we shall find them diffused thro' every part of the Universe; and that, either united in one Subject,

Ch.XI. Subject, or else separate, and in different Subjects.

By Horace they are united:

Qui studet optatam cursu contingere metam, Multa TULIT, FECITque puer—— (a)

So are they by Livy, in that manly Speech of Caius Mucius—Et FACERE et PATI fortia, Romanum est (b).

So are they by Shakespeare:

Whether 'tis nobler in the Mind to SUFFER The Stings and Arrows of outrageous Fortune,

Or-by opposing end them (c).

So are they by Milton:

⁽a) Hor. Art. Poet. v. 412.

⁽b) Liv. ii. 11.

⁽c) Hamlet.

Fal'n Cherub, to be weak is miserable, Doing, or Suffering— (d)



In Virgil we see them separated, and Passion given to Man, Action to the Deity:

O! PASSI graviora, dabit DEUS his quoque finem (e).

As therefore ACTION and PASSION are of the most extensive influence; as they partake in some degree the nature of Qualities or Attributes, by being intimately and essentially connected with Substance; while the Relatives, When, Where, and Position, seem rather connected accidentally: we shall give ACTION and PASSION their just Precedence, and make them the Subject of the present Chapter.

⁽d) Par. Loft. i. 157.

⁽e) Æn. i. 203.

Ch.XI.

THE SPECIES OF ACTION are as many, as are the different Modes of acting in the different Species of Agents.

THE FIRST SORT OF ACTION is that of mere Body Alone, confidered either as void of Sensation wholly, like Fire, when it burns; or at least as void of Sensation, at the time when it operates. Such is that great and universal Power. the Power of Attraction, which all Body, animal, vegetable, and elementary, is found to possess in proportion to it's Quantity; that active Power, (if it may for. the present be so called) the Effects of which modern Philosophy has scrutinized with fo much penetration. Such too are those Energies peculiar to different Bodies, and arising out of them from their different Natures; as when we say the Heavens emit Light; the Trees produce Leaves; the Fields give us Corn, &c:

Cælum nitescere, arbores frondescere, Segetes largiri fruges, &c. (f) Ch.XI.

Such too are those more secret Operations of Bodies, whether magnetic or electric; to which may be added the Virtues and Efficacies of Bodies Medicinal. All these Energies in a comprehensive sense may be called the Astion of Body, considered merely as Body (g).

A SE-

⁽f) Cicer. Tufc. Difp. i. 28.

⁽g) This is that Genus of Energies, which, as Jamblichus describes it, indicates no Action belonging to Soul, or to Animal Nature, or to Reasonings, or to Life, but which (on the contrary) exhibits the particular Energy of Bodies, considered as Bodies purely inanimate; and that as well with respect to all the Peculiarities which appear to surround Body, as to all those various inherent powers of Bodies, not only as they are solid and capable of resissing, but as they contain within them a multitude of Powers that are efficacious and active.

—Γέν ενεργείων, ὅπερ ψυχῆς κὰ Φύσεως κὰ λόγων κὰ ζωῆς ἐπιδείκνυσι ποίησιν, τῶν δὲ σωμάτων, ἦ σώματα ἐςιν ἄψυχα, Φανερὰν καθίςησι τὴν σωματοείδη S 2 ἐνεργείων

Ch.XI. A SECOND SORT OF ACTION is that which is the refult of Sensation, Instinct, and natural Appetite, and which therefore, being complicated, must necessarily be confined to Bodies of a higher Genus, to Bodies Sensitive, that is, to Animals.

Dente lupus, cornu taurus PETIT, &c. (h)

No where are these Actions exprest with more elegance and conciseness, than by our own Epic Poet, in his Paradise Lost:

By Fowl, Fish, Beast, was flown, was swam, was walk'd (i).

ενέργειαν κατὰ τάσας μεν τὰς τος το σώμα τὰς Φαινομένας ἰδιότητας, κατὰ τάσας δε αὐτῶν τὰς δυνάμεις, εχ ἡ μόνον ςερεά ἐςι κὰ ἀντίτυπα, ἀλλ' ἡ κὰ τερὶ αὐτῶν ἔχει τολλὰς δραςηρίες δυνάμεις. Simpl. in Prædic. p. 81. Edit. Bafil. 1551.

⁽h) Hor. Sat. ii. I.

⁽i) Par. Loft, vii. 502. Καὶ δήλου όσα ωστέ έςι εὸ όποῖα εἴδη των ἀλόγων ζώων, τοσαύτα κὸ τοιαύτα κὸ

THERE IS A THIRD SPECIES OF Ac-Ch.XI.

TION more complicated even than the preceding, being derived not only from Sensation, Instinct, and natural Appetite, but from Reason also, superadded to these.

This is a Mode of Action peculiar to Man, because of all the Animals we see around us, Man alone possesses the Reasoning Faculty.

Widely diversified is the Share affumed by the fubordinate Faculties of the Human Soul, in Actions of this Character. Sometimes they submit to Reason, and are (as becomes them) obedient; at other times they reject her, and proceed

έν τῷ ωοιεῖν διάφορά ἐςιν εἴδη κατὰ την τοιαύτην ἐνέργειαν, ωερὶ ὧν ἐν ταῖς ωερὶ ζώων ἰςορίαις διαριθμεῖσθαι εἰώθαμεν.— Tis evident that as are the Species of Irrational Animals in Number and in Quality, so many and such are the different Species in Acting agreeably to this [animal] mode of Energy; which several Species of Acting have been usually enumerated in the Historics of Animals. Simpl. in Præd. p. 81, ut suprà.

Ch.XI. of themselves. And hence it is, that

Actions, produced from Causes so peculiarly complicated, derive to themselves
the Colours of Good and Evil, and are
denominated, in distinction to every other
deed of Man, Actions Moral.

WHEN VIRTUE and PLEASURE addressed the young HERCULES, VIRTUE supposed him to have a Reason, that could controul his Appetites; PLEASURE supposed him to have Appetites, that would bear down his Reason. Had he obeyed the last, he had been vicious; as he obeyed the first, he was virtuous. There was a Conslict in either case between his better part, and his worse; and in that Conslict both Species of Faculties were presumed, his Rational Faculties, and his Irrational (k).

THERE

⁽k) See Xenoph. Mem. 1. ii. c. i. S. 21.

The above Species of Action is thus described by Simplicius—Τρίτον δε το ωσιείν γένο, τὸ εν τῷ ωράσ-

THERE is A FOURTH SORT OF AC- Ch.XI.

TION, where the INTELLECT, operating without Passions or Affections, stays not within itself, but passes out (as it were) to some external Operation. 'Tis thus that NATURE, considered as an Efficient Cause, may be called the Energy of God, seen in the various Productions that replenish and adorn the World. 'Tis thus

σειν ἀπηρίθμηται, ὅπερ τε λόγε τὰς ωερὶ τὰ αἰσθητὰ κὸ σύνθετα ωσιήσεις ἐπιτροπεύει, προαίρεσιν κὸ βέλην δόξαν τε κὸ σκέψιν κὸ τὰς τοιαύτας ωσιήσεις ωαρεχόμενον. Simpl. ut fupra. The Genus, comprehended under the Idea of ACTING MORALLY, is the third of this Order; that Genus, which prefides over the Energies of Reason with respect to the concrete Objects of Senjè (that is, which prefides in the affairs of common life), and which furnishes upon occasion Deliberate Choice, Volition, Opinion, Inquiry, and other Energies of the same character. Simp. in Præd. p. 80. B. Edit. Bas. 1551.

We have in this place translated wedges to all morally, the better to distinguish it from woise, a word of meaning more extensive, signifying simply to do, or to make.

Ch. XI that ART, confidered as an Efficient Caufe, may be called the Energy of Man, which imitates in it's Operations the plastic Power of Nature (1).

> THE LAST AND MOST EXCELLENT SORT OF ACTION is feen in Contemplation; in the pure Energy of SIMPLE IN-TELLECT, keeping within itself, and making itself it's own Object. This is the highest Action of which we are susceptible; and by it we imitate THE Su-PREME BEING, as far as is confistent with our fubordinate Nature. 'Tis to this that our great Poet alludes, when fpeaking of his Employment, during a state of Blindness, he says-

⁽¹⁾ Τάτε δε σολύ μεν έςι το θείου σολύ δε κή εν ταις τέχναις, μιμεμέναις την Φύσιν, κό το σαραλειπόμενον ύπ' αὐταῖς (lege αὐτῆς) ἀναπληρέσαις. Simplic. ut suprà. Of this Species of Acting THE DIVINITY has a large share—a large share also falls to. ARTS, that imitate Nature, and supply what she bas omitted.

ARRANGEMENTS.

Then feed on thoughts, which volun- Ch.XI.

Harmonious Numbers—— (m)

THE

(m) Par. Loft. iii. 37.

This highest Mode of Action (if it may be so called) is thus described by Simplicius in the same Comment, p. 80:

Το ωερὶ τῶν νοητῶν κὰ ἀμερίςων ἐσίων ἐπισκοπέμενου ἀπλαῖς νοήσεσιν—That which, with fimple intellections, inquires concerning Subftances intelligible and indivifible—that is, Substances which, having no Parts,
cannot, like Body, be infinitely divided.

Archytas has enumerated these Species of Energy or Action, but in a different manner, beginning with the last of them first, and so proceeding inversely, till he come to the first that is mentioned here, and this he omits. His words are worthy of perusal—
Τὰς δὲ Ἐνεργείας διαφοραὶ τρεῖς το μὲν γάρ τί ἐς ιν αὐτᾶς ἐν τῷ Βεωρὲν, οἷον ἀςρονομέν τὸ δὲ ἐν τῷ πράσσεν, οἷον τραταγὲν κὰ πολιτεύεσθαι γίγνεται δὲ ὰ μὲν ἐνέργεια κὰ ἄνευ διανοίας, οἷον ἐν τοῖς ἀλόγοις ζώοις. Γενικώτατα δὲ αὐτά. Archyt. apud Simpl. in Præd. p. 80. There are three Distinctions of Action or Energy: One Sort of it consists in Contemplating, as when we study the Stars; another in Making, as when we

Ch.XI. THE Species of Passion may be understood by their reciprocating for the most part with those of Action.

THUS tho' the DIVINE MIND, by being pure and intellectual Energy, can have nothing passive in it's transcendent

heal a Disease, or exercise the Art of a Carpenter; another [not in making but] in Acting, as when we lead an Army, or administer a Commonwealth. There is too a fourth Energy, WHERE THERE IS NO USE OF REASONING, as in Animals irrational. These are the Forms of Action the most general and comprehensive.

Simplicius tells us, that Archytas has omitted the other Species (that which we have mentioned first, and which respects Bodies inanimate) because he did not consider it as a Species purely active, nor as arising from any internal and sensitive Principle of Motion. And yet perhaps, in an introductory Treatise, it can hardly be considered as introduced improperly, tho it must be allowed at the same time to want this Requisite.

We observe by the way that this distinction of Actions is called by Logicians Actio transsens, and Actio immanens, which corresponds in Grammar to Verbs Transstive on one side, and Verbs Neuter and Middle on the other. See Hermes, 1. i. c. 9.

theory (n); yet THE MIND OF MAN, Ch.XI. which has intensions and remissions, is, for that reason, necessarily PASSIVE in two important manners, either as Truth, real or apparent, demands it's Assent; or as Falshood, real or apparent, demands it's Dissent.

It is in consequence of this Passivity of the Human Mind, which I chuse to call Passivity Intellectual, that it becomes susceptible of Discipline and Institution, and thus finds itself adorned (according as it is cultivated) with the various tribe both of Arts and Sciences (o).

As the Reason of Man is acted upon by the appearances of Truth and Falshood, so are the Appetites of Man (and not only of Man, but of Brutes also) acted upon by the approach of Pleasure

⁽n) See Chapter on Qualities, p. 161.

⁽o) Vid. Arrian. Epist. 1. iii. c. 3.

Ch.XI. and Pain (p). This therefore may be called SENSUAL PASSIVITY, in opposition to the rational above described.

'Tis to this Davus alludes in Horace,

Duci ventre levem: Nasum nidore supinor,

Imbecillus, iners, &c. (q)

The moulding this Passivity of the human Mind into as much of the fair and honest, as it is capable of receiving, when it is applied to Nations, is called Politics; when to Families, Oeconomics; when to Individuals, Ethics(r); and is in general

⁽p) Δεῖ δὲ τιθέναι τὸ τὸ Φαινόμενον ἀγαθον ἀγαθον ἀγαθον ἀγαθον ἀγαθον ἀγαθον ἀγαθον ἀγαθον τὸ τὸ ποῦν Φαινόμενον γὰρ ἐς ιν ἀγαθον.

— We ought to suppose, that both Good Apparent and Pleasure supply the place of Good (real); for Pleasure is Good apparent. Arist. de Animal. Motu. p. 154. Edit. Sylb.

⁽q) Hor. Sat. ii. 7. 37.

⁽r) Nicephorus Blemmides adopts this Division from the Peripatetic School—Το δε Πρακτικον διαιξείται

the Foundation of *Moral* Principles and Ch.XI. Conduct.

THE PASSIVITY PECULIAR TO BRUTES may be seen in the various purposes, to which we direct their several Powers;

εἰς ἢθικον, οἰκονομικον, κὰ ωολιτικόν κὰ ἢθικὸς μέν ἐςτε ΦιλόσοΦ, ὁ τὰ ἑαυτε ἤθη κὰ ἄλλε ρυθμίζειν δυνάμενω οἰκονομικὸς δὲ, ὁ κὰ οἶκον ὅλον ἐππαιδεύειν καλῶς ἐπιςάμενω ὁ δέ γε ωόλιν ἢ κὰ ωόλεις διεξάγων κὰ διακυθερνῶν ἀρίςως, ωολιτικός—The PRACTICAL Part of Philosophy is divided into MORAL, OECONOMICAL, and POLITICAL. It is the MORAL Philosopher, who is able to adjust his own manners, and those of any other individual: the OECONOMICAL, who knows how to instruct well a whole Family; and he, who in the best manner conducts and governs a City, or Cities, this Philosopher is the POLITICAL one. Blem. Epitom. Logic. p. 37.

As we have been speaking just before of Passivity, it is proper to remark that the same Writer, from the same Philosophy, takes notice of two Species of it, a better Species and a worse; Passivity Corruptive, and Passivity Completive; Corruptive, as when any Being is consumed by Fire; Completive, as when a Being either learns, or is acted upon, either by it's Intellect, or it's Senses.—Τῶ πάχειν δὲ τὸ μέν ἐςι Φθαρτικὸν, ως τὸ καίεσθαι τὸ δὲ τελεωτικὸν, ὡς τὸ μανθάνειν, κὸ γινώσκειν, κὸ αἰσθάνεσθαι. Νίς, Blem. Ερ. Log. 158.

Ch.XI. fome to plow our lands, others to carry us; a third Species to hunt for us, &c. (s)

THE PASSIVITY OF INSENSITIVE BODIES, whether vegetable or not, is equally conspicuous in the various Ends, to which we apply them. The Earth we plow; over the Sea we sail; out of the Forest we build our Ships, &c. This insensitive Passivity, tho' it submit to the Action of other Bodies upon it, yet always follows the peculiar Nature of the Being, to which it belongs; so that the Effects often differ, where the Active Power is the same.

Limus ut hic durescit, et hæc ut cera

Uno EODEMQUE igni— (t)

⁽s) See Vol. I. Treatise I. p. 40, 41. See also as to the Passivity of Bodies inanimate, p. 39, 40, of the same Treatise.

⁽t) Virg. Ecl. viii. 80.

LASTLY, all Bodies, that act by AT- Ch.XI.
TRACTION, are themselves RECIPROCALLY ACTED UPON, as modern Philosophers have clearly demonstrated.

As to Action and Passion in general, it may be observed, that the great and diversified Mixture of them, which runs thro' the World, and is conspicuous in every part of it, has a necessary reference (as all other Mixtures have) to Principles more simple, out of which it is compounded. Pure Activity we may suppose MIND; and PURE PASSIVITY, MATTER. As Mind is capable of acting whatever is possible, so is Matter of having, whatever is possible, acted upon it. The former is the Source of all · Forms, Distinctions, and Beauty; the latter is the Receptacle. In the Supreme MIND there is nothing passive; in THE LOWEST MATTER, there is nothing active ;

Ch.XI. tive (u); while all between is a Mixture of both, where in different parts the different Principles are prevalent, and from this prevalence give the Being it's proper Character.

If we call Man a Composite of Soul and Body, as a rational Being, he has a Motion of his own; as a sensitive Being, he has a Motion in common with Brutes; as a Being merely corporeal, a Motion in common with all Bodies whatever. A Dog has only the second and third of these Motions, and a Stone only the last. Thus is the Stone least active, the Man most so, and the Brute between both.

⁽u) See Chapter vi, p. 109, 110.

Thus Archytas in Simplicius—Τα καθαρά γένη τέ ωοιείν εξ ωάχειν εν τοις άρχη ικωτάτοις—τε μεν ωοιείν εν τῷ θεῷ, τὰ δὲ ωάχειν ἐν τῆ βλη—The pure and simple Genera of acting, and being acted upon, exist in the primary and most original of Beings; ACTING, in God; the being acted upon, in Matter. Simplic. in Præd. p. 84. B. Edit. Basil. 1551.

THE Modes are different, under which Ch XI. Beings act upon one another.

Some (as the whole tribe of corporeal Masses) only ast, because they are asted upon, and that too by something external, and persectly distinct from themselves. 'Tis thus the Nail acts upon the Timber, because the Hammer acts upon the Nail; and were not the Hammer to drive, the Nail would never penetrate.

Now fuch Motion as this is but a Species of Passivity, because the the Beings, which possess it, have an original Power to receive Motion, they by no means possess an original Power to impart it. And hence it follows, that if something did not exist more intrinsically active than themselves, they would never act, and there would be no Motion at all.

ACTION of this kind (if it deserve the name) is the ACTION of BEINGS,

T which,

Ch.XI. which, tho' Moveable, are not intrinsically Motive, that is, Causes of Motion.

ANOTHER Mode of ACTION may be found in the following instances.—A Lamb acts upon the Senses of a Wolf—that Sensation acts upon his Appetite—that Appetite acts upon his Corporeal Organs—by the Action of these Organs he runs, he seizes, and he devours the Lamb.

A CHILD is seen by its Mother likely to fall from a precipice.—The Sensation acts upon her parental Affections—these Affections act upon her Corporeal Organs.

—By the Action of these Organs the runs, she seizes, and she saves her Child.

THE Instances we are going to allege, appear to be more blended with deliberation and thought. The Splender of the Roman Empire acted upon the Imagination of Casar—that Imagination acted upon his Desire of sovereign Power—that Desire acted upon the Faculties of his Mind and Body.

By the Energy of these Faculties he passed Ch.XI. the Rubicon, conquered Pompey, enslaved Rome, and obtained the wished-for Empire.

AGAIN—The Domination of Cæfar acted upon the Imagination of Brutus—that Imagination acted upon his Love for the Republic—that Love for the Republic acted upon his corporeal Organs.—His hand in consequence plunged a Dagger into Cæfar, and, for a time, the Republic, which he loved, was restored.

In all these instances the Corporeal Organs act, like the Corporeal Masses before mentioned, because they are first acted upon. But then they are not acted upon, as those are, by other external Bodies, but by internal Appetites, Assections, and Desires, all which, as well as the Organs, are Parts of one and the same Bring. Such Being therefore is not, like Beings of the first Order, in a manner passive and only moveable; but, as it possesses within itself the power of imparting Motion, as

Ch.XI.

More is said upon this Subject in the subsequent Theory concerning Motion (a).

We shall only add, that, in the above Modes of Acting, when Bodies act upon Bodies, the Action for the greater part is reciprocal. While the Oar impels the Wave, the Wave resists the Oar; while the Axe hews the Timber, the Timber blunts the Axe; while the Earth attracts the Moon, the Moon attracts the Earth. And hence the Theory of Action and Re-action, so accurately scrutinized in modern Philosophy.

IF we contemplate the World, as well the vegetable as the animal, we shall

⁽a) Concerning that Motion, which does not arise from the Collision of one Body with another Body, but where the Power which moves, and the Organs, which are moved, appear to be both of them vitally UNITED in ONE and the same Subject, see below, p. 408 to p. 425 Concerning the necessity of something, different from Body, to put Body in Motion, see below, p. 437. Concerning Causative Motion, see below, p. 440. Concerning Immobility, see below, p. 449, 450 and Hermes, p. 360 in the note.

perceive Action and Passion diffused Ch.XI. thro' every part.

AND yet it must be observed both of Action and of Passion, (such at least as those we see around us) that they are neither of them perpetual in any one particular instance. Corn only nourishes, and Hemlock only poisons, when they meet a proper Body, on which to operate: the Musician does not always perform, nor is the Ear always affected by Sounds: the Painter does not always paint, nor is the Eye always affected by Colours.

AND hence the rise of that notable thing called Power; that dormant Capacity, into which both Action and Passion, when they cease, retreat; and out of which, when they return, as from their Source they flow.

THERE is nothing which appears so nearly to approach Non-entity, as this singular thing called Power; yet is there nothing in fact so truly different from it.

*T

Ch.XI.

OF Non-entity there are no Attributes, no Affections; but every Power possesses a specific and a limited character, which not only distinguishes it from Non-entity, but from every other Power.

Thus among the ACTIVE Powers, the Smith, when asleep, has still those Powers, which make him a Smith; the Shipwright, when asleep, has still those Powers, which make him a Shipwright. The Powers distinguish both from the rest of mankind, who purely from not having them are neither Smiths nor Shipwrights.

The fame Powers help to distinguish the fame Artists from one another: for the Powers, though invisible, are incommutable; nor can those of the Shipwright enable him to forge an anchor, or those of the Smith enable him to construct a Ship.

If we pass from active to Passive Powers, we shall find these after the same manner to be limited in every

every Subject, and different in every Ch.XI. Species. Timber has the Capacity of becoming a Ship, but not an Axe; Iron on the contrary of becoming an Axe, but not a Ship (z). And tho' different Agents, by operating on the fame Patient, may produce different Effects (as the Shipwright makes Timber into a Ship, while the Carpenter forms it into a House); yet still must each Effect correspond with the passive Capacities; or else, where these sail, there is nothing to be done.

WERE the case otherwise, were not the Passive Powers essentially requisite as well as the Astive, there would be no reason, why any thing might not be made out of any thing.

FAR distant therefore from Non-entity are Passive Powers, however latent:

⁽²⁾ See Chapter the fourth conserning Matter, p. 64, 65; also p. 148, 149.

Ch.XI, so far indeed, that where they differ effectially from one another, they often lead to Effects perfectly contrary, tho the Agent, which operates, be individually the same:

Limus ut hic durescit, et hæc ut cera

Uno eodemque igni, &c (a).

'Tis from this Theory we perceive the reason of that ancient Axiom, Quicquid recipitur, recipitur secundum modum recipientis; than which nothing can be more true, when properly understood.

As to the Active Powers, there is an important distinction between those called Rational, and the Irrational. The Subordinate are mostly confined to the producing One Contrary out of Two. Fire can only warm, but cannot cool; Ice can only cool, but cannot warm. But

⁽a) Virg. ut sup. p. 270.

the rational Powers imply both Contraries Ch.XI. at once, and give to their possessor the Alternative of producing either. The Musician has the Power both of Melody and Dissonance; the Physician the Power both of healing, and making sick; the Magistrate the Power of deciding both justly and unjustly.

The reason of this is, that Rational Power alone is sounded in Science, and 'tis always one and the same Science, which recognizes Contraries; that, which teaches us Harmony, teaches us Discord; that which informs us what is Health, informs us what is Disease; that which discerns Truth, discerns also Falshood. Hence therefore it is, that as every Science may be called double in it's Powers of Knowlege; so all Action founded on Science may be called double in it's Powers of Acting (b). A noble Privilege this

⁽b) Καὶ τῶν δυνάμεων αἱ μὲν ἔσονῖαι ἄλογοι, αἱ δὲ μετὰ λόγε—κὰ αἱ μὲν μετὰ λέγε ϖᾶσαι τῶν ἐναντίων

Ch.XI. to Man, if well employed; a truly unfortunate one, if abused; since by this He alone, of all sublunary Beings, is properly intitled either to Praise or Dispraise.

WITH respect to Powers in general, there is this to be observed: so important are they to the constitution of many Beings, that often, the latent, they are

αί αὐταὶ, αί δὲ ἀλογοι, μία ἐνός οἶον τὸ Θερμον τὰ Θερμαίνειν μόνον, ἡ δὲ ἱατρικὴ νόσε κὰ ὑγείας αἴτιονο Αἴτιονοῦς, ὅτι λόγ۞ ἐςὶν ἡ ἐπιςἡμη, ὁ δὲ λόγ۞ ὁ αὐτὸς ὁηλοῖ τὸ ϖρᾶγμα, κὰ τὴν σέρησιν—Of Powers fome will be found Irrational, others are attended with Reason—and as to those which are attended with Reason, the same Powers will extend to things Contrary; but as to the irrational, one Power will extend only to one Contrary; what is hot for example will only conduce to heating; but the Art of Medicine will become the Cause both of Disease and of Health. The Cause is, that this Medicinal Science is Reason, and the same Reason discovers both the thing, and it's Privation. Arish. Metaph. p. 143. Edit. Sylb.

See also Vol. the first of these Treatises, p. 173, 298; to these add p. 150 of the present Treatise, especially in the Note.

more regarded than the strongest appa-Ch.XI. rent Attributes. Thus 'tis from their medicinal Powers only, that we value the several Species of Drugs; and from their generative Powers only that we value the several Species of Seed, while little regard is paid to their sensible, that is their apparent Qualities, farther than as they help to indicate those invisible Powers.

THE just Opposite to Power is Energy, which, as it's etymology (c) shews, implies the existing in Deed or Act, as opposed to that existence, which only implies Possibility.

And here 'tis worth observing, that Every thing existing in Power is necessarily roused into Energy by something, which itself existed PREVIOUSLY in

⁽c) 'Εν "Εργω, In Act, in Deed. See a sketch of the difference between Act and Power, Vol. I. p. 13, 14.

Ch.XI. Energy (d). Events and Incidents never stand still; some Agents or other are perpetually energizing, tho' all perhaps by turns have their respites and relaxations, as many of them at least as are of the subordinate Tribe. It happens indeed in the World, as in a Ship upon a Voyage. Every hand at a proper seafon has his hours of Rest, and yet the Duty never ceases, the Business of the Ship is never at a stand; those, that wake, roufing those, that sleep, and

⁽d) 'Twas a Doctrine of the Peripatetic School, ότι σρότερον ένέργεια δυνάμεως έςι-THAT ENERGY is PRIOR TO POWER. Arift. Metaph. p. 150. 152. - αεὶ γαρ ἐκ τὰ δυνάμει ὄντ Το γίγνεται το ἐνεργεία ον ύπο ενεργεία όντω. οδον ανθρωπω έξ ανθρώπε, μεσικός υπο μεσικέ, αεὶ κινέντός τιν 🕒 ωρώτε το δε MINEU EUSPYEIQ non esiv. That which exists in Energy is always formed out of that which exists in Power, by SOMETHING WHICH EXISTS (already) IN ENERGY; for example Man is formed by Man, the Musical Artist by the Musical Artist, there being always some FIRST (or prior) BEING, which gives the Motion. Now THAT, WHICH GIVES THIS MOTION, IS ITSELF ALREADY IN ENERGY. Ariftot. Metaph. p. 151. Edit. Sylb.

being in their turn roused again them- Ch.XI. felves.

But another way to shew that Energy is of necessity PREVIOUS TO POWER, confifts in admitting the contrary Hypothefis.

LET us suppose for example a Man placed in a part of Space, where there was, and ever had been, eternal Silence; or otherwise in a part, where there was, and ever had been, eternal Darkness: could fuch a one ever actually either have heard or feen, however exquifite his Powers both of hearing and feeing ?—And why not ?—Because to the evocation of one of these Powers, there is a necessity of actual Sound; to that of the other, of actual Light; fo that had not these Energies existed previoufly, his Powers must have remained dormant thro' the period of their existence. Suppose therefore all Energies of Ch.XI. all kinds to stop: how could they ever revive? Were they all once sunk into one universal Sleep, where should we find a waking Cause, to rouse them from their Slumbers (e)?

And what then are the inferences from this Speculation, that Power necessarily arises from previous Energy?—One is, that all those Doctrines about Order

⁽e) 'Tis hence that Aristotle, speaking according to the Principles of his Philosophy, fays of things eternal, unalterable, and necessary, that is, things ever in Energy—εί ταυτα μη ην, εθεν αν ην, if THESE WERE NOT, THERE COULD BE NOTHING. Metaph. 153, ut suprà. 'Tis a pertinent Question, stated by the fame Author, in another part of the fame Tract-Πώς γαρ κινηθήσεται, εί μηθεν ές αι ένεργεία αίτιον ξ έ γαρ ήγε ύλη κενήσει αυτή έαυτήν - How can things ever be set in motion, if there be no CAUSE (previously) EXISTING IN ENERGY? Mere Matter itself cannot move itself .- Ibid. 201. And soon before in the same page-ένδέχεται γάρ το δυνάμει ον μη είναι. δεί άρα είναι άρχην τοιαύτην, ης ή έσια ενέργεια-It may happen that the thing, which exists in Power only, may NOT EXIST AT ALL: there must therefore be (in the Universe) fuch a Sort of PRINCIPLE, AS THAT THE VERY ESSENCE OF IT SHOULD BE ENERGY.

fpringing from Disorder, Beauty from Ch.XI. Consusion; of Night and Chaos being the oldest of Beings; in general, of the Perfect and Actual arising from the Imperfect and Potential; however they may be true as to the material Cause of things, yet are they far from being true with respect to their real and essential Origin. There is nothing in fact more certain, than that the Actual and Perfect are previous to their Contraries; else there could never have been in the Universe any thing Actual or Perfect.

ANOTHER inference is, that the most minute and contemptible Energy, now actually existing, necessarily proves the Existence of an eternal Energy, to which, as to it's Cause, it is ultimately referable. And what can such eternal Energy be, but something, whose very Essence is that Energy (f); something, which

⁽f) See the Note preceding—The founder of the Peripatetic Sect, speaking of the Deity, uses the following

Ch.XI. knows no remissions, like subordinate Energies, no occasional retirings into Power and dead Capacity, but is even The same immutable and perfect? Without such a Principle the Universe could never have begun; or when once begun, could never have been continued. And what shall we call this Principle?

lowing Expressions—ή γας Ν΄ ἐνέργεια, ζωή· Ἐκεῖνω δὲ, ἡ Ἐνέργεια—The Energy of Mind or Intellect,
is Life: and HE (the Supreme Being) is that ENERGY.
Metaph. p. 203. See also Ammon. in Lib. de Interpretat. p. 198, B. &c. where the Arrangement of
Beings is deeply and philosophically discussed, and
exhibited.—Έξης δὲ τέτοις ἐπιδειξαι βυλόμενω, χ.
Τ. λ.

'Tis agreeably to this reasoning we are told—
Τε χρόνε ἀεὶ ωρολαμθάνει ἐνέργεια ἐτέρα ωρο ἐτέρας,
ἔως τῆς τὰ ἀεὶ κινῶντ۞ ωρώτως—that one Energy in
point of Time always precedes another, till we arrive at
the Energy of that Being, which eternally gives Motion
in the first instance. Metaph. Θ. η. p. 152. Edit.
Sylb.

Which is as much as to affirm (in other words) that there is a gradual ascent of active efficient Principles, one above another, up to that ONE ACTIVE PRINCIPLE, which is ORIGINAL and SUPREME.

Shall we call it Body or Mind?—The Ch.XI. best way to answer this, will be to search within ourselves, where we may discover, if we attend, a portion of either Being, together with the several Attributes appertaining to each.

And so much for the two Arrangements or Predicaments of Action and Passion.

C.H A P. XII.

Concerning When and Where—Concerning Time and Place, and their Definitions—When and Where, how diffinguished from Time and Place, how connected with them—Descriptions of When and Where—their Utility and Importance in human Life—Various Terms, denoting these two Predicaments—others denoting them not, yet made to denote them—When and Where, their extensive influence—plausible Topics—concurring Causes—Opportunity, what—Chance, what it is not, what it is—Fate, Providence—co-operating Causes—Supreme Intelligence.

C. XII. E have faid already, that Time and Place agree, as they both belong to Quantity Continuous (a). So

⁽a) See before, p. 183 to 187.

ther of them be separated, as we separate a piece of timber, there would then be Intervals without Time, and Distances without place. Thus far then they agree, while in this they differ, that a million of different things may exist in one instant of Time, but never more than one thing at once can occupy one Place.

And hence the Nature of Place may be called distributive, while that of Time may be called accumulative. Hence too as they agree in some respects, and differ in others, they are necessarily not simple, but compound Ideas, both belonging to one Genus, and each distinguished by specific differences. Having a Genus and a Difference, they become capable of Definition, since 'tis on these two requisites that all Definition is founded (b).

TIME

⁽b) Omnis DEFINITIO constat GENERE et DIFFE-RENTIA-Fell, 218. Termini verò essentiales (Defini-U 2 tionis

C. XII.

Time therefore is Continuity, successive in itself, and accumulative of it's proper subjects; Place is Continuity, co-existent in itself, and distributive of it's proper subjects.

We have faid thus much about these two Beings, because When and Where, tho' distinct from both (c), are necessarily connected with them, and cannot well be understood without reference to this Connection.

MEN, human affairs, and universally all sensible and corporeal Beings, as none of them are infinite either in *Duration* or *Extent*, must have something of course

tionis fcil.) GENUS et DIFFERENTIA. Sanderson, l. i. c. 17. See also Wallisii Logic. l. i. c. 23.— Οι μεν γας δρισμοί εκ γενες κο των συςατικών είσι διαφορών, τετέςι των είδοποιών. Amm. in 5. voces, p. 67.

⁽c) How they are distinct, see below, particularly in Note (f), also p. 297.

PLACE circumscribes their Extent, and TIME, their Duration; and hence the necessary connection of things corporeal with these two; and not only of things themselves, but of all their Motions, of all their Accidents, in short of all they are able to do, and of all they are able to fuffer.

For example, certain persons are to meet for a certain purpose. They must be informed of the *Time* and *Place*, or their *Meeting* would not be practicable. First then for the *Time*—

When shall we three meet again
In thunder, light'ning, and in rain (d)?

The answer to this question connects their Meeting with a certain Time; and in the

⁽d) Shakef. Macbeth.

C. XII. Relation between these two, we behold the rise of the Predicament, WHEN.

When the battle's lost and won, When the hurly burly's done (e).

AGAIN

Where's the Place?

(e) Οὐ μέντοι έτε τῷ χρόνῳ ταυτὸν τὸ Ποτὲ, ἀλλ' είπερ άρα, έν χέσει τη τρος του χρόνον. Nor is WHEN the same with TIME; but if any thing, it confifts in The RELATION WHICH IT BEARS TO TIME. Simpl. in Præd. p. 87. B. Ed. Baf. 1551. And again -- όταν δέ τι πράγμα, έτερον ον τε χρόνε, κ έχ ώς μέρω χρόνο λαμδανόμενον, οχέσιν έχει ωρός χρόνον, κ) δια τέτο εν χρόιω ές ίν, ωσπερ ή εν Σαλαμίνι ναυμαχία ἐν τῷδε χρόνφο τότε ἄλλη κατηδορία γίγνεται, ή τε Ποτε, άλλη έσα wapa το Ποσόν.-But when any particular THING, WHICH IS DIFFERENT FROM TIME, and which is not assumed as any PART OF TIME, has a RELATION TO Time, and for this reason is IN Time, as for example the Sea-fight at Salamis, which happened at fuch a particular Time: then there arises A DIFFERENT PREDICAMENT, that of WHEN, a Predicamen's different from that of Quan-TITT. Simplie. in Prad. p. 88. Ejufd. Edit.

The answer to this question connects their C. XII. Meeting with a certain Place; and in the Relation between these two, we see the rife of the Predicament, WHERE.

--- upon the Heath, There we go to meet Macbeth (f).

LET us take another example. Virgil, we are informed, wrote his Georgics at Naples. By Naples, in this instance, is the Place of Virgil circumscribed, which might else have been at Rome, at

⁽f) 'Αλλ' ώσπερ ἐπὶ τε χρόνε άλλο μὲν ἦν ὁ χρόν 🕒, άλλο δε το κατά χρόνον, ἢ χρόνε τί Ετως άλλο μέν ο Τόπο, άλλο δε το κατά Τόπου, η τέπε τί.-For as in TIME, Time itself is one thing, and that, which is according to Time, or famithing belonging to it, is another thing; so also is PLACE one thing, and that WHICH IS ACCORDING TO PLACE, or SOMETHING BELONGING TO IT, another Thing. Simpl. in Prad. ut sup.

UBI non est Locus, sed Esse in Loco. Quando non est Tempus, sed Esse in Tempore. Feil, p. 104, 107.

C.XII.

Mantua, &c. The connection therefore of Virgil with this City gives us an answer to the Question, WHERE.

AGAIN, he wrote them, we are told, while Cæsar Augustus was on his Oriental Expedition. Here the time of this Expedition circumscribes the time of Writing, which might else have been (for ought we know) during the Wars with Brutus, with Antony, &c. This relative Connection gives an answer to the Question, When.

Fulminat Euphraten bello, victorque volentes

Per populos dat jura, viamque affectat
Olympo:

Illo Virgilium me tempore dulcis alebat Parthenope, studiis storentem ignobilis otî (g).

⁽g) Virg. Georg. iv. sub fin.

THESE elegant lines, which we fo C. XII. justly admire, are in fact nothing more than the common date of an epiftle; as if the Author, having finished his work, had subjoined Naples, such a Month, such a Year: so great, even in trivial matters, is the force of Numbers, and sublime Ideas.

HENCE then we perceive the nature both of WHEN, and of WHERE. WHEN is not mere Time, nor is it Beings and Events; but it is Beings and Events, as they stand related to Time. Again, WHERE is not properly Place, nor is it Beings and Events; but it is Beings and Events, as they stand related to Place. If therefore the When only be given, and not the Where, then might the thing have happened either here, or at the Antipodes: and, by parity of reasoning, if the Where only be given, and not the When, then might the Event have happened, either yesterday, C. XII. yesterday, or before the flood. 'Tis then only comes precision, when we view the two united (h).

AND hence by the way the utility and praise of those two subordinate accomplishments (for Sciences I cannot call them) Geography and Chronology. By acquainting us with the relations, borne by illustrious persons and great events to the different portions both of Time and of Place, they afford us proper means to contemplate human affairs; to view the general Order and Concatenation of Events, and our own Connection with this Order, as Members of the same universe.

⁽b) Ούτως δὲ κὰ τὸ Π΄ς κὰ τὸ Ποτὲ ἀδελφά ωως ἐςὶ ωρὸς ἄλληλα, κοινὴν ἐπίσης ωαρέχονλα τὴν συντέλειων ωρὸς ὅλην τὴν γένεσιν, κὰ τοῖς κινεμένοις τὴν ἴσην χρείαν συμβαλλόμενα. And thus it is that WHEN and WHERE are a fort of Brothers one to another, offording equally a common Perfection to all things that are generated, and contributing an Utility of equal Vaive to all things, that are in Motion. Simplic. in Præd. p. 87. Ed. Bajil. 1551.

In general it may be observed, that C. XII. whatever is an answer to the Question, WHERE, belongs to the Genus or Predicament of WHERE; and whatever is an answer to the Question, WHEN, belongs in like manner to the Predicament of WHEN. When did fuch a thing happen? -Now; this instant; to-day; yesterday; a century ago; in such a year of our Lord; such a year of the Hegira; such a year of Rome; such an Olympiad, &c. To these may be added fuch terms in the past, as Lately, Formerly, Long ago, &c. and fuch also in the future, as Immediately, Soon, Hereafter (i), &c. Again, WHERE did fuch a thing happen ?—Here; There; in England; in Europe; in China; in the Moon; in the Sun, &c. To these may be

⁽i) See many of these Terms elegantly and accurately explained in Aristotle's Physics, 1. iv. c. 13. The Terms alluded to are νῖν, ποτέ, ἤδη, ἄρτι, ωάλαι, ἐξαίψυης, κ. τ. λ.

C. XII. added fuch Terms as Near, Far off,
Above, Below, &c.

All these Terms, by thus answering these Questions, serve to indicate the Relation of some Being, or Event, either to Time, or to Place; and, tho' some of them do it with greater precision, and some with less, yet did they not all do it in some degree, they could not belong to these two Predicaments.

WE cannot affert the same of such terms, as an Inch, a Foot, or a Cubit; a Day, a Month, or a Year. The reason is, they indicate no Relation of Time, or Place to particular things, but only measure out definite Portions in these two infinite Natures.

WITH regard to the human Body, not only the Whole fills its proper Place, but fo too does every Limb. Hence, as it's particular Place is a measure to each Limb,

Limb, fo is this Limb in it's turn made C. XII. a measure to that Place, in order to define a like portion of it, existing elsewhere (k). And hence the origin of such Measures, as an Inch, a Foot, a Cubit, and the like, which are all of them deduced from certain Limbs in the Human Body.

But tho' the Limbs of Man were tolerably adequate to measure Place, yet were his Motions by no means adequate to the mensuration of Time, derived (as they appear) from such a number of Appetites; from such a variety of Fancies,

⁽k) This is indeed a common Property to all Menfuration, that the *Meafurer*, and the thing *meafured*, should *reciprocate*, so that while the Gallon meafures the Wine, the Wine should meafure the Gallon; while the Ell meafures the filk, the filk should meafure the Ell.

See before, the Quotation given in the Note, p. 22. Zisns is there rendered a Quart, not as if this last represented that Greek measure, but as it was a measure, familiar to an English Reader.

C. XII. and contradictory Opinions. Here therefore were mankind obliged to quit themselves, and to recur to Motions more orderly than their own; to the real Motion of the Moon, to the apparent Motions of the Sun, in order to obtain such orderly Measures, as those of Days, and Months, and Years.

> AND thus from the nature and origin of these Terms, we may perceive how they are distinguished from the Predicaments of WHERE and WHEN.

> THERE is (if I may use the Expression) an enlarged When, such as To-day, during this Month, this Year, this Century; and a precise When, the indivisible instant, in which the event happened. So also is there an enlarged Where, as in London, in England, in Europe, &c. and a precise Where, that is to fay the exact Place, which each individual fills (1).

⁽¹⁾ See Hermes, p. 118, Note (g).

Now as every man exists in such a C.XII. precise Where, and during such a precise When, so is it with reference to these two Relations of his own, that he recognizes the When and the Where of all other Beings. WHEN lived Charles the Great? Almost three hundred Years before the first Crusade. Tho' this Answer tell us the distance between Charles and that Expedition, yet are we still uninformed as to the Time, When he lived, unless we have fomething given us, to connect him with ourselves. And WHEN, we demand, happened the first Grusade? - About seven hundred Years ago. Here we have the temporal Relation between ourselves, and that Event; fo that having previously learnt the like relation between that Event and Charles the Great, we of course recognize the Time, WHEN that Prince existed; that is to say, the temporal Relation between our own existence, and his. The same too happens in ascertaining the Place, WHERE.

U 15

AND

C.XII.

AND hence it follows, that such Meafures of Time and Place, as a Year, a Century, a Foot, a Furlong, tho' they belong not of themselves to the present Predicaments or Arangements, may yet be made a Part of them, by being properly affociated. Such they become, when we say a Furlong hence, a Century since, a Foot below, a Year after. The reafon is, they are brought, by fuch afforciation, to define Relative Existence, in doing which the very Essence of these Predicaments confists.

> AND now a word, as to the force of these two Predicaments; their influence in the World; and more particularly in human affairs.

> CÆSAR, when he was affaffinated, fell at the feet of Pompey's Statue. The celebrated Hampden received his death's wound upon that Field, where* he had

^{*} Clarendon's History, Book VII.

first executed the Ordinance for levying C, XII. troops to serve the Parliament. From a royal Banqueting-house, built by himself in prosperity, was an unfortunate Prince! led to an unjust Execution. In each of these instances the PLACE, WHERE, is a plausible Topic; a Topic equally suited either to raise compassion, or, if we would fophisticate more harshly *, to infinuate Judgments, divine Vengeance, &c. But to quit topical arguments, which in fact demonstrate nothing.

'Twas by an unfortunate fall fo nearthe conclusion of the race, that the swift footed Salius lost the prize to young Euryalus (m). 'Twas by being attacked when asleep, and over-powered with liquor, that the gigantic Polypheme fell a facrifice to Ulysses (n). 'Twas by living in an age, when a capricious audience ruled,

^{*} St. Luke, xiii. 4.

⁽m) Eneid. v. 286, &c.

⁽n) Odyss. ix. sub fin.

C. XII. that the elegant Menander so often yielded to Philemon, his inferior by the confession of all succeeding ages (o). The Race is not to the Swift, nor the Battle to the Strong, nor yet Favour to men of Skill; but TIME and CHANCE happeneth to them all (p).

The same concurring Causes, which acted in these cases like adversaries, can become in others the most powerful allies. $\Delta \delta s$ $\mu o \pi \tilde{s} s \tilde{\omega}$, Give me Where to stand, was a well known saying of the famous Archimedes. He wanted but a Place, where to fix his Machine, and he thought himself able to move even the World (q). Shakespeare tells us,

⁽⁰⁾ Vid. Quinctil. l. x. c. 1. — A. Gell. l. xvii. c. 4. who fays of him, ambitu, gratiâque, et factionibus fæpenumerò vincebatur.

⁽p) Ecclesiastes, xi. 11.

⁽q) See the Life of Archimedes in Rivaltus's Edition of his Works, Paris, 1615. Fol.

There is A TIDE in the affairs of men,
Which, taken at the flood, leads on to fortune:
Omitted, all the voyage of their life
Is bound in shallows—— (r)

When Horace fent a Messenger with some of his Works to Augustus, his charge was to deliver them, if Augustus was in health; and not only so, but in good humour; and not only so, but in a humour to call for them:

Si validus, si lætus erit, si denique poscet (s).

Such a Stress did this polite author lay on the propriety of THE WHEN. Virgil mentions finely the

MOLLISSIMA fandiTEMPORA (t).

⁽r) Julius Cæsar, Act iv. Sc. 5.

⁽s) Hor. Epift. 1. ii. Ep. 13.

⁽t) Æneid. iv. 293.

C.XII. He makes too his Fury suspend her Powers of Mischief, till she could catch a LUCKY MOMENT to make her influence more extensive:

At Sæva e speculis TEMPUS Dea NACTA nocendi,

Tartaream intendit vocem, &c (u).

And hence we may collect a just idea of the Term, Opportunity. It is not merely Time, concurring with Events, for Time attends them all, be they prosperous or adverse; but it is Time, concurring favourably; 'tis Time, co-operating as an auxiliary Cause (x).

TIME

⁽u) Eneid. vii. 511.

^(*) According to the Stagirite, Good passes thro' all the Predicaments, and, as it stops at each, assumes a different Denomination. In Substance, it is MIND and DEITY; in Quality, 'tis that which is fust; in Quantity, that which is Exact, and according to Measure;

TIME (it is faid) and CHANCE happen-C. XII. eth to all.—And what is this CHANCE?

—Is it the Chance mentioned by Milton, as refiding at the Court of Chaos (y)?

Or is it the fame, which fome Philosophers suppose to have framed the World, and to have maintained in it ever since no inconsiderable Sway?—If fuch Chance be the strict opposite to a rational Principle, 'tis hard to conceive, how it should have supplied it's place, and without the least ingenuity have produced a work so ingenious. 'Tis hard also to conceive, how without a Reason that should exist, which

fure; and in the Predicament When, it is Opportunity, έν δὲ τῷ Πότε, ὁ Καιρός that is to fay, Good or Favourable, acceding to the Time When, and characterifing it, gives it by fuch acceffion the Name of Opportunity. Aristot. Ethic. Eudem. p. 86. Edit. Sylb. Locum autem Actionis, Opportunitatem Temporis esfe dicunt; Tempus autem Actionis opportunium Græcè Εὐκαιρία, Latinè appellatur Occasio. Cic. de Offic. i. 40.

⁽y) Parad Loft, Book ii. 965.

C. XII. it requires fo much Reason (even in part only) to comprehend (2). There is however another fort of Chance, which, under the name of Fortune, we find described as follows—a Cause not manifest to human reasoning (a); not a Cause devoid of Reason, but a Cause, which human Reason wants the means to investigate.

We may learn from experience, that whatever opening there may be left for human Freedom, (and enough is there

⁽z) Hanc igitur in Stellis constantiam, hanc tantam tam variis cursibus in omni æternitate convenientiam temporum, non possum intelligere sine mente, ratione, consilio. Cic. de Nat. Deor. ii. 21.—Dubitant de Mundo, ex quo et oriuntur et siunt omnia, casune ipse sit effectus aut necessitate aliquâ, an ratione ac mente divinâ: et Archimedem arbitrantur plus valuisse in imitandis Sphæræ conversionibus, quam Naturam in efficiendis. Cic. de Nat. Deor. ii. 34.

⁽a) — δουεῖ μὲν αἰτία ή Τυχὰ, ἄδηλ ⑤ δὲ ἀνθεωπίνη διανοία. — Λτίβι. Phys. ii. 4. p. 33. Edit. Sylb. Infeed of διανοία, they used afterwards the Term λογισμώ.

left both for Merit and Demerit) it is c. XII. not so uncontrouled, as in the least to affect the Universe. It is not in our power to interrupt the course of Nature; nor can we, like the Giants of old, heap mountain upon mountain. There is an irreversible Order of things, to which we necessarily submit; an indissoluble Concatenation of successive Causes with their Effects, by which both the Being and the Well-being of this Whole are maintained.

This divine Order or Concatenation has different denominations: referred to the Supreme Being as to it's author, we call it FATE; referred to his Forefight for the Good of all, we call it PROVIDENCE (b).

⁽b) Three Terms are here employed, CHANCE, FATE, and PROVIDENCE; the two first of which have been often improperly afferted, the last has been often hardily denied, and all this to favour the Atheistic System.

C. XII.

'Tis this which mingles itself with all our Actions and Designs; which co-operates with the Pilot, the Husbandman, and the Merchant; nor with these alone, but with all of every degree, from the meanest Peasant, up to the mightiest Monarch. If it co-operate favourably, they succeed; if otherwise, they fail. And hence the supposed efficacy of Time and Place, so often of such importance in this co-operation. 'Tis hence, the Race is not to the swift, nor the Battle to the strong, &c.

A PILOT fails, with intention to reach a certain port. All, that the skill of a good Navigator can suggest, is done;

The Author of these Notes has endeavoured to give such Meanings to the Terms Chance and Fate, as may render them subservient to the Cause of Providence, and by making them subsily dependent on The Supreme Intelligent Principle, to make them weaken the System of Atheism, rather than contribute to it's Support.

yet he sails at a *Time*, when hurricanes arise, and, instead of gaining the destined port, is dashed upon the rocks. A Farmer with proper industry manures and sows his fields; yet the Seasons destroy his harvest, and (according to his own Phrase) the Times fight against him. A Merchant travels for the sake of gain to a distant country, and there contracts a pestilential disease, which carries him off.

These Incidents, thus connected with Time and Place, are referred in common language to Chance, as to their Cause; and so indeed they may, as far as Chance implies a Cause, which human reasoning was not able either to foresee or obviate. But if we go farther, and suppose it a Cause, where there is in fact no Reason at all; in such case we do nothing less than deify Chance, committing the affairs of the World to the blindest of Guides, instead of that One, All-Good, All-Powerful, Di-

PHILOSOPHICAL

C. XII. VINE INTELLIGENCE, which in the same undivided instant both sees, and hears all things (c).

314

And so much for the two Genera or Arrangements of When and Where.

⁽c) See Epicharmus, quoted in the Note, p. 115.

C H A P. XIII.

Concerning Position or Situation—
What it is, and how deduced—how it
exists in Beings inanimate—in Vegetables
—in Man—animal Progression—Works
of Art—Attitudes—illustrations of Attitude—from Poets—from Actors—from
Orators—It's Efficacy, whence—Position,
among the Elements of Democritus—it's
Influence and Importance in the natural
World—in the intellectual.

HE Arrangement or Predicament C.XIII. of Position or Situation has a near affinity with that of Place. They are both of the relative order, and are both conversant, when taken strictly, about corporeal Substances only. They differ however, in as much as the simple Possession of Space constitutes Place; the

C.XIII. the manner (a) of possessing it, Position, or Situation.

Now

(a) Differt SITUS ab UBI in hoc, quod UBI est Locatio Totius, SITUS est ORDINATIO PARTIUM IN LOCO. UBI est simpliciter ESSE IN LOCO; SITUS, secundum Partium Ordinationem. Fell, p. 104.

Ad SITUM omnem requiritur TRIPLEX HABITUDO, quæ conjuncta constituit Situm; Habitudo Partium alicujus Totius inter se; Partium alicujus Totius ad ipsum Totum; Partium et Totius ad Locum. Sanderson, p. 49, l. i. c. 14.

Prædicamentum Situs (Κεῖσθαι) respicit Postionem rei, tum respectu partium suarum inter se, tum respectu Loci, aliarumque rérum. Wallis, l. i. c. 13.

- ἔτε ἔν τὸ κείμενον σῶμα, ἔτε τὸν τόπον, ἐν ῷ κεῖται, τῆ διανοία ωεριλαμβάνοντα, δεῖ νοεῖν τὸ κεῖσθαι, μόνην δὲ τὴν ἔχεσάν ωως Θέσιν ἐν τῷ γένει τὰ κεῖσθαι λογιζόμενον κατὰ ωάντα τὰ ἴντα, ὅσα ωέφυκεν ἔτερα ὑφ᾽ ἐτέρων ἀνέχεσθαι, ἢ ἐνιδρύεσθαι τὰ ἔτερα ἐν τοῖς ἐτέροις ἡ γὰρ τοιάδε συμπλοκή τῶν ἐνιδρυμένων κὰ τῶν τὴν ἔδραν ωαρεχόντων κυριωτάτη κὰ ωρωτίςη ἐκὶ τὰ κεῖσθαι ὑπογραφή—We are not to understand the Genus of Lying or Position, by taking into our Difcustion either the Body lying, or the Place, in which it lies, but singly and solely by taking into our account the peculiar Mode of Site in the Genus of lying, as it runs thro' all those ranks of Beings, which are formed by nature to be supported some of them by others, or to be feated some

Now the manner, in which a Body C.XIII. possesses, has respect to certain Relations, which exist, some within, and some without it; Relations, which arise from it's Parts, it's Whole, it's immediate Place, and the Place surrounding it.

We shall explain what we affert (which perhaps may appear obscure) by beginning from Bodies the most simple, and passing from these to others, more complex and diversified.

THE simplest and most perfectly similar of all Bodies is the Sphere (b). If

fome of them upon others; for 'tis This Connection Between Things, That are seated, and Things that afford the Seat, which makes the primary and the strictest Description of Lying or Position. Simpl. in Præd. p. 85. Ed. Basil. 1551.

⁽b) The Sphere, and other folid Figures, foon after mentioned in this Chapter, are for the greater part well known. He however, who wishes for ocular infpection,

C.XIII.

therefore we take a Sphere, and place it upon the ground, the Part farthest from the Earth's centre we call it's Top; that the nearest, it's Bottom; and all lying between we call it's Middle. These Distinctions in the Sphere regard external Objects only, because the Sphere being every where similar contributes nothing to them itself. If we roll it therefore along, the Distinctions are not lost; only, while the Motion continues, they perpetually vary, and that merely with reference to local Distinctions, existing without.

And hence it follows, that the Sphere; tho' it have *Place*, yet according to these reasonings has in strictness no *Position*, because it has no peculiar Parts deducible

fpection, may find them all (the Sphere alone excepted) among the Diagrams of the eleventh and twelfth Books of *Euclid*, to which Books we refer him, as they are eafy to be had, under various Editions.

from it's own Figure, which Parts can C.XIII. be called Top or Bottom, as contradiftinguished one to another.

WHAT is true of the Sphere, may be afferted almost as truly of the five Platonic Bodies, the equilateral Pyramid, the Cube, the Ostoedron, &c. and that, because they are not only regular, but because their several Faces are every way similar.

What is true of these Bodies, is true also of their Opposites, the Bodies I mean, which are not only dissimilar, but universally irregular. Fragments of Rock, and Hillocks of Sand, have neither Top nor Bottom, but what is merely casual; and therefore, tho' of necessity they exist in Place by being Bodies, yet, as they have no internal local Distinctions under the meaning here adopted, it of course follows they cannot properly have Position.

C.XIII.

But if we pass to those Bodies, which are neither irregular, like the broken Rock, because they have Order and Proportion; nor yet every way similar, like the Sphere, because they have Extensions that are unequal (such for example as the Cylinder, or the Parallelipipedon); here we shall find the very Bodies, from their own Attributes, to concur with the World around, both in acquiring to themselves Position, as well as in diversifying it.

THE Cylinder for example extends farther one way than another, and therefore possesses within itself three such parts, as two Extremes, and one Mean. If we so place it therefore, that one of these Extremes (no matter which) shall be most remote from the Earth's Centre, and the other most near; in such case, by this manner of blending external and internal Relations, the Cylinder is said to stand. If we remove in part the higher Extreme

from it's Perpendicular, and thus differ- C.XIII. ently blend Relations, the Cylinder is faid to INCLINE. And if we pursue this Inclination, till the two Extremes of Top and Bottom become horizontal, then is it said TO LIE. The Motion, which leads from Standing to Lying, we call FALLING; that from Lying to Standing, we call RISING. Every one of these Affections may well happen to the Cylinder, because it's peculiar Figure, taken with it's peculiar Place, co-operates to the production of the Positions here described.

'Tis not so with those Bodies already mentioned, where these internal Characters are not distinguished. The Sphere and the Cube neither FALL nor RISE, because they neither STAND nor LIE more at one time than another.

But suppose we go farther; suppose to one Extreme of this Cylinder we add

a new

C.XIII. a new Part, that is a Capital; to the other

Extreme another Part, that is a Base:
the two Extremes of the Cylinder would
no longer in such case remain indiscriminate, but the Characters of Top and Bottom would become distinguished and ascertained, even in the Figure itself, without looking to things external.

THE consequences of these new Characters are new Modes of Position. A Pillar (for such we must now suppose it) is not only capable, like the simple Cylinder, of Standing and of Lying, but in as much as two of it's Parts, that is to say it's Extremes, are effentially distinguished, if it rest on it's Base, it stands upright; if on it's Capital, it stands inverted.

LET us carry our suppositions farther, and by a Metamorphosis, like one of Ovid's, transform this Pillar into a Tree.

Let the Capital sprout into Branches, the

Shaft become a Trunk, and the Base CXIII. strike into Roots. Here then in a vegetable Subject we behold the same Distinctions; a Top, a Bottom, and a Middle of it's own, leading as before to the same Diversities of Position.

Ir we still pursue the Metamorphosis, and transform the Tree into a Man, making it's Branches into a Head, it's Trunk into a Body, and it's Roots into Feet, we shall discover also in an animal Subject the same Distinctions as before; and the Subject will in consequence be capable of Lying, as well as of Standing upright, as well as inverted.

But this is not all. Man is not only an extended substance, like the Column, or the Tree, but over and above, as an Animal, he is by nature locomotive. Now the Part of him in progression, which leads the way, we denominate his Forepart or Front; the Opposite, his Hinder-

Y 2

part

C.XIII. part or Rear; and the two Parts upon each Side, his Right and his Left.

AND thus has Man, in confequence of his animal Frame, over and above the former Distinctions of Top and Bottom (both of them common to the other Subjects already described) four additional Distinctions peculiar to him as an Animal, the Distinctions of Front and Rear, of Right and Left, which four are wholly unknown both to the Column, and to the Tree.

WHILE he is under the Position of Standing, these four Distinctions have little force, but when he happens to Lie, then is their Essicacy seen, and each of them leads to a new, and different Position. If his Front, while he is lying, be nearest to the Earth, then is he said to lie Prone; if his hinder-part or Rear, then to lie Supine; if neither of these, then 'tis either on his Right, or on his Left; which

which *Positions* are unknown either to C.XIII. the Pillar, or the Tree.

Thus, besides the Standing Positions of Upright and Inverted, has Man, in consequence of his Frame, four other Positions, which appertain to him, as he lies; so that his Frame taken together, as one perfect Whole, is susceptible of six Different and Specific Positions, which have reference to the six Different and Specific Extensions of his Body (c).

FABLES tell us, that the triangular Island Sicily was thrown upon the Giant Typhoeus. Under one Promontory lay

⁽c) See these different Extensions, which Aristotle calls Distances, διας άσεις, fully discussed in his Treatise de Animalium ingressu, p. 129. Edit. Sylb. In his History of Animals, we read—ἔχει δ' δ ἀνθεωπ το κότω, κὸ τὰ ἔμπεοσθεν κὸ τὰ ἀνθεωπτο κὸ τὰ ἀνπεοσθεν κὸ τὰ ἀπίσθια, κὸ δεξιὰ κὸ ἀρις ερά. Hist. Animal. p. 17. Edit. Sylb.

C.XIII. his Right Arm; under another, his Left; under a third, his Legs; under mount Ætna, his Head; under the whole island, his Body, having his Breast upwards, his Back downwards. These Positions refer to the several Extensions above described.

Vasta giganteis ingesta est insula membris Trinacris, et magnis subjectum molibus urget

Æthereas ausum sperare Typhoëa sedes.

Nititur ille quidem, pugnatque resurgere Sæpè;

DEXTRA sed Ausonio manus est subjecta Peloro;

Læva, Pachyne, tibi: Lilybæo crura premuntur;

Degravat Ætna CAPUT: sub quâ RESU-

Ejectat, flammamque fero vomit ore Typhoeus (d).

⁽d) Ovid. Metam. v. 346.

Bur not to anticipate with regard C.XIII. to Poets, of whom we shall say more hereafter.—In a Cube there are fix Faces, capable of denoting as many Positions; and yet there is this important Difference between the Cube and the Man: the Faces of the Cube being all of them Similar, it's Positions, being only nominal, can only refer to things without, and every Face can alike concur to the forming of the same Position. But the Parts analogous to these in Man being all of them dissimilar, his Positions, being real, are by no means thus commutable; but if the Head be uppermost, then, and then only, is he, by Position, Upright; if his Back be uppermost, then, and then only, is he, by Position, Prone; nor can he possibly be called either Prone or Upright, were any other Part to exist in the same Place, excepting the two here mentioned.

Y 4

FROM

C.XIII.

FROM what has been alleged, we see the true Origin of Position or Situation. "It arises from the Relation, "which the Distinctions of Parts with-"In bear to the Distinctions of Place" Without; and it varies of course, "as this Relation is found to vary." The fewer of these internal Distinctions any Being possesses, the less always the number of it's possible Positions. As it possesses more, it's Positions increase with them.

As to the Progression of Animals, peculiar to them as Animals, that Progression, (I mean) by which they move not as mere Bodies, but as Bodies possessed of Instinct and Sensation; it is to be observed, that this Progression is formed by the help of Joints and Muscles, and that these, during their operation, form within the Animal Body a variety of Angles and Flexures. Now hence hence arises a fresh multitude of charac- C.XIII. teristic Positions. There is one Position, under which a Bird flies; another, under which a Horse gallops; a third, under which a Man walks, &c.

THESE latter Politions differ from those already described, because they depend not on a fimple Relation of the whole Body to things without, but on a diversified Relation of it's different Parts, one to another. The Painter well knows the force of these Positions, since 'tis by these he superinduces Motion upon immoveable Canvas; so that from the Position, which we see, we infer the Progression, which we see not (e).

AND this naturally leads us to confider the Power of Position or Situation in Works of ART. Among the common Utenfils of life, fuch as Chairs,

⁽e) See Vol. I. Treatise 2. chap. ii. p. 61.

c.XIII. Beds, Tables, &c. there is a Position which is proper, and another which is absurd; a Position, by which they attain their End, and another, which renders them useless. Some derive their very Essence (if I may use the Phrase) from their Situation; for example, the Lintel, from being over the Door; the Threshold, from

"Tis the Knowlege of these various Positions peculiar to Animal Bodies, and to the human above the rest (commonly known by the name of Attitudes)

being under it (f). We may pass from

these to Productions more elegant.

⁽f) Τὰ δὲ θέσει [λέγεται,] οἶου ἐδὸς κὰ ὑπέρθυρου ταῦτα γὰρ τῷ κεῖσθαι ωως διαΦέρει—Other Subflances are DENOMINATED FROM THEIR POSITION, as the Threshold, and the Lintel; for these differ by the peculiar manner of their being situated.—And soon after—Ουδὸς γάρ ἐςιν, ὅτι ἔτως κεῖται κὰ τὸ εῖναι, τὸ ἔτως αὐτὸ κεῖσθαι σημαίνει—For it is a Threshold, because it is so situated; and it's Existence indicates it's being situated after this manner. Metaph. H. c. 6. p. 135. Edit. Sylb.

which constitutes so eminent a part in C.XIII, the character of a perfect Painter. To the Statuary, if possible, it is a more important Science still, because he has no helps, like the Painter, from Colour, Light, and Shade.

Instances in support of this affertion (if it need supporting by instances) may be alleged innumerable both from Pictures and from Statues.

PAINTING gives us the ATTITUDES of St. Paul, and the Sorcerer Elymas, in the Cartoon of Raphael—of Apollo, and the dancing Hours, in the Aurora of Guido—of the fleeping Christ, his Mother, and St. John, in the Silence of Caracci—of many and diversified Holy Families, in the works of Carlo Maratti, &c.

FROM ATTITUDES in Painting we pass to those in Sculpture; to that of the Medicean Venus, the Farnesian Hercules,

C.XIII. the Niobe, the Laocoon, the Wrestlers, the dying Gladiator, &c.

'Trs easy, when we are describing these Beauties, to be diffuse in our expressions, and to exclaim, as we describe, how charming, how exquisite, &c. But the observation is just, as well as obvious—

Segniùs inritant animos demissa per aurem, Quàm quæ sunt oculis commissa sidelibus (g).

HE, therefore, who would comprehend ATTITUDE in Works such as these, must either visit the Originals, or else contemplate them (as he may easily do) in Models, Drawings, and Books of Sculpture and Painting (h).

WE

⁽g) Hor. Art. Poet. 180.

⁽b) Those, who dwell in the neighbourhood where these Notes were written, may find excellent examples of ATTITUDE at Wilton House (Lord Pembroke's) among the Statues and Basso-Relievos there preferved; in particular the Cupid bending his Bow;

We shall find less difficulty in the C.XIII. works of *Poets*, because these address us in Words, and convey to us their Ideas not thro' our language but their own. 'Tis thus Virgil gives us an ATTITUDE of SITTING IN DESPERATION:

—— Sedet, æternumque sedebit Infelix Theseus——— (i)

SHAKESPEARE, of SITTING IN DE-SPONDENCE:

She sate, like Patience on a monument, Smiling at Grief——— (k)

MILTON, OF CONJUGAL AFFECTION:

the Faun, who, as he stands, turns his Body, and looks backward; the Figures in the Marriage-Vase; the Amazon fighting, the Basso-Relievos of Meleager, of Niobe, of Ceres and Triptolemus, &c.

⁽i) Æn. vi. 517.

⁽k) Shakespeare's Twelfth Night, Act. ii. Sc. 6.

C.XIII. —— He, on his fide

LEANING HALF RAISED, with looks of

cordial Love

Hung over her, enamour'd— (m)

Ovid makes Thescelus, as he elevated a javelin, to be miraculously petrified in the VERY ATTITUDE OF AIMING:

— Utque manu jaculum fatale parabat Mittere, in Hoc hæsit signum de marmore GESTU (n).

More formidable is a similar ATTI-TUDE at Milton's Lazar-house:

— OVER them triumphant DEATH his dart SHOOK—but delay'd to strike— (0).

⁽m) Par. Loft. v. 11.

⁽n) Ovid. Metam. v. 182.

⁽⁰⁾ Par. Loft, xi. 491.

THERE are ATTITULES less tremen- C.XIII. dous, that mark Reverence and Humi-

THUS Shakespeare,

These Crouchings, and these Lowly Courtesies

Might fire the blood of ordinary men (p).

THE LYING, OF BEING EXTENDED ON SOME SURFACE, is an ATTITUDE in most instances so connected with Death, that DEATH is often denoted by that Attitude alone.

Thus Neftor in Homer, speaking of the Greek Commanders, slain before Troy—

⁻ ἔνθα δ' ἔπειλα κατέκταθεν όσσοι ἄριςοι,

[&]quot;Ευθα μεν Αΐας ΚΕΙΤΑΙ άρήϊος, ἔνθα δ' Άχιλλεψς,

[&]quot; Δυθα δε ΠάτροπλΟ, θεόφιν μήςως ἀτάλαντΟ,

[&]quot;E. 0 2 8' ¿μος Φίλ Φ υίος - (9)

⁽p) Shakespeare's Jul. Casar, Act iii. Sc. 1.

⁽⁴⁾ Hom. Odyf. r. 108.

C.XIII. There fell the bravest of the Grecian Chiefs;

There LIES great Ajax; there Achilles

LIES;

There too Patroclus, knowing as a God;
There my own much-lov'd Son—*.

THUS SHAKESPEARE,

O! mighty Cæfar, dost thou LIE so LOW? Are all thy triumphs, glories, conquests, spoils, Shrunk to this little measure— (r)?

SLEEP, whom the Poets deify, appears under a SIMILAR POSITION:

— CUBAT ipse Deus, membris languore solutis (s).

'Twas perhaps from this Resemblance in Position, joined to that other, the

^{*} See also Hom. Il. 2. v. 20, and Mr. Clarke's Note, where he quotes Quinctilian.

⁽r) Shakef. Jul. Caf. Act iii. Sc. 3.

⁽s) Ovid. Metam. xi. 612.

C.XIII.

Cessation of the Sensitive Powers, that SLEEP and DEATH were by the Poets called Brothers (t), and that the former (u) upon many occasions served to represent the latter.

IF we pass from Poets to Actors (by Actors, I mean those of Dramatic Com-

Εθδομες ευ μάλα μακρον, ατέρμονα, νήγρεον θπνου:

See Hom. Iliad. A. 241. Virg. En. x. 745. Horat. Od. 1. iii. 11. v. 36. Mosch. Idylb. iii. 105.

Even in Profe-writers, when we read of persons being dead, we sometimes read that they are FAL'N ASLEEF, or that they slept with their fathers. Corinthians i. c. xv. v. 6. 2 Chronicles c. ix. v. 31.

It feems indeed to have been a custom with all nations, in instances of this fort, to mitigate the Harshiness of the Thing fignified, by the Mildness of the Terms that signify it: a well known Figure, called in books of Rhetoric Euphemismus.

⁽t) See Hermes, 1. i. c. 4. p. 52.

⁽u) When Sleep represents Death, it is commonly marked with some strong Epithet: by Homer it is called a brazen Sleep; by Virgil; an iron Sleep; by Horace, simply a long Sleep; which Idea the Poet Moschus heightens, by calling it not only a long Sleep, but a Sleep, without an end; a fleep, out of which we cannot be awak'd.

C.XIII. positions) we shall find that ATTITUDES and Positions make at least a moiety of their merit; so that tho' they are to speak 'tis certain, as well as to act, yet 'tis from acting, not from speaking, that they take their denomination.

> Nor are just Positions without their Use to that real Actor upon the Stage of life, I mean the Orator. Demosthenes, in whom Rhetoric attained it's last Perfection, was at first so unsuccessful, that he was in a state of despair, 'till Satyrus, a celebrated Tragedian, shewed him the amazing force of Action, by the different manners of repeating certain Pasfages out of Euripides and Sophocles (x).

> And whence is it that Positions derive this wonderous Efficacy?—'Tis in fact because the Body is an Organ to the Soul; an instrument, whose Gestures cor-

⁽x) Plutarch. Demosth. p. 849. Edit. Xyland.

respond to every Affection, and are diver- C.XIII. fified by Nature herfelf, as those Affections are found to vary. Words move only those, who understand the language; and even, where the Language is understood, acute Sentiments often escape the comprehension of unacute Hearers. But Action, spontaneously indicating the Motions of the Soul, is a Language which not only the vulgar, but even the stranger comprehends. Every one knows the external Gestures and Signs, by which, without teaching, both himself and others indicate their feveral Affections; fo that feeing the same Signs recur, he feadily knows their Meaning, in as much as Nature herself supplies the Place of an Interpreter. But to pass from these Speculations to others more general.

THE primary Elements of Democritus were Atoms and a Void. As for the Variety and the Specific Differences, which he found to exist in things, he deduced

C.XIII. them out of his Atoms, first by Figure, as A for example differs from N; next by Order, as AN for example differs from NA; and lastly by Position, as Z for example differs from N, these Letters in Figure being in a manner the same (y).

THUS POSITION, according to this Philosopher, stands among the Principles of the Universe.

A HIGH rank this, and yet perhaps not an undeferved one, if, by attending to particulars, we contemplate it's extensive influence. For not to mention

⁽y) What others called σχήμα, FIGURE, Democritus called Υυσμός; Τάξις, ORDER, he called Διά-θήγη; and Θέσις, SITUATION, or POSITION, he called Τροπή. See Arifot. Metaph. p. 11. 134. Edit. Sylb. See also Libi de Gen. et Corrupt. l. i. c. 2. where Philoponus in his Comment informs us, that these strange words were λίξεις 'Αξδερικα', Abderic Words; Words used in Abdera, the city to which Democritus belonged.

the force of Position in the different C.XIII. parts of every animal; not to mention the admirable SITUATION even of subordinate Subjects; the grateful variety of Lands and Waters, of Mountains and Plains; what shall we say to the Posi-TION of the Heavens above, and of the Earth beneath; of the Sun himself in the centre, and the feveral Planets moving round him? If we carry our hypothesis farther, and suppose (as has been well conjectured) that the Solar System itself has a proper Polition respecting the fixed Stars; and that they, prefiding in other Systems, maintain a certain Position respecting the System of the Sun; we shall have reason so to esteem the importance of this GENUS, that perhaps upon it's Permanence depends the Permanence of the World.

Nor need we be furprifed, tho' it be properly an Attribute of things corporeal, if we discover the traces of it even in Z₃ Beings

C.XIII,

Beings incorporeal. If the sensible World be an Effect, of which the Cause is a so-vereign Mind, all that we discover in Effects we may fairly look for in their Causes, since here it's prior Existence (2) is in a manner necessary.

Thus our own Minds are not only the Place and Region of our Ideas (a), but with respect to these Ideas, such is the influence of Position, that upon this in a manner depends our whole Perception of Truth. Let us for example invert the Terms of a simple Proposition, and instead of saying, that Every Man is an Animal, say that Every Animal is a Man; and what becomes of the Truth which

⁽z) See Hermes, p. 381, &c.

⁽a) — Καὶ εὖ δη οἱ λέγονες την ψυχην εἶναι τόπον εἰδῶν—Well therefore do they conceive, who say that the Soul is the Region of Forms, or Ideas. Arist. de An. iii. 4. p. 57. Edit. Sylb. See before, p. 98, in the Note, and p. 112, 113.

fuch Proposition contained? Let us derange in any Theorem the Propositions themselves, confounding them in their order, blending them promiscuously, putting the first last, and the last first; and what becomes of the Truth which such Theorem was to demonstrate? 'Tis lost, till the Propositions recover their natural situation.

- tantum series, juncturaque pollet *.

Democritus, whom we have just mentioned, in order to shew the importance of Arrangement in natural Subjects, and the amazing Differences that arise, where the Change is most minute, ingeniously remarks, that out of the same Letters are formed Tragedy and Comedy (b). We may affirm as considently,

^{*} Hor.

 ⁽b) — ἐκ τῶν αὐτῶν γὰς τραγωδία γίνεται, κὰ κωμωδία γραμμάτων. De Gen. et Corrupt. l. i. c. 2.
 P. 4. Edit. Sylb.

C.XIII. that out of the fame Terms are formed Truth and Falshood (c).

THE Efficacy indeed of this INTEL-LECTUAL POSITION is so great, that thro' it not only the wise know, but the unwise become informed. 'Tis by the strength of this alone that all Teaching is performed; all Learning acquired; that the simple and uninstructed are led from Truths acknowleged (d) to Truths un-

known,

⁽c) SIMPLE TERMS are to be found in the feveral PREDICAMENTS OF ARRANGEMENTS here treated, being THE FIRST PART OF LOGIC.

From different Arrangements of these Terms arise Propositions; and from different Arrangements of Propositions arise SYLLOGISMS.

PROPOSITIONS are the Object of THE SECOND PART OF LOGIC; SYLLOGISMS, of THE THIRD.

There is no going farther, for the most enlarged Speculations are but Syllogisms repeated. Such then, in a Logical and Intellectual View, is the FORCE and EXTENT of the PREDICAMENT of POSITION or SITUATION, here treated.

⁽d) There is an Order or Arrangement peculiar to Learners; and of course, with respect to them, the Principle

known, and thus ascend by due de-C.XIII. grees to the sublimest parts of Science.

What then shall we say to that STUPENDOUS POSITION, to that MARVELLOUS

ARRANGEMENT, EXISTING WITHIN THE

DIVINE MIND; where the whole of Being is ever present in perfect Order; and to which no single Truth is ever latent or unrevealed (e)?

Principle or Beginning of Knowlege is different from what it is, according to the order of Nature. Hence the following observation.— Η δε ('Αρχη') όθεν αν κάλλιςα έκαςον γένοιτο οῖον κ' μαθήσεως, ἐκ απὸ τε πρώτε κ' τῆς τε πράγματ αν άρχης ενίστε αρκτέον, αλλ' όθεν ρας' αν μάθοι—There is another Species of Beginning, and that is the Point, from which any thing may be done after the best manner; for example in the affair of Learning any thing, we are sometimes not to begin from what is first, and which is the Principle or Beginning of the Thing itself, but we are to begin from that Point, whence any one may learn the most easily. Metaph. l. iv. c. 1.

In the Meno of Plato there is a striking example of an Arrangement of Truths, which lead an uninstructed Youth to the Knowlege of a fine and important Theorem in Geometry. See the Dialogue of that name in Plato, and Mr. Sydenham's elegant and accurate Translation, enriched with Diagrams.

⁽e) See before, p. 110, 161, 204, 5, 6, 266, 272, 287, 8.

C.XIII. If we would comprehend the Dignity of Position in this it's Archetypal Form, let us view it at the same instant with something, it's perfect contrary: let us compare it for example to the sick Man's Dream, or to that Chaos of Ideas, which fills the Mind of one delirious. As we can find sew Situations more unfortunate, than these latter; so we can conceive no one more respectable, or divine, than the former.

AND so much for the Genus or Arrangement of Position, which arises from the Genus or Arrangement of Where, as this from the Genus or Arrangement of Relation, both Position and Where being in their nature Relatives.

C H A P. XIV.

Concerning HABIT, or rather the BEING HABITED-It's Description-it's principal Species deduced and illustratedit's Privation-Conclusion of the second or middle part of the Treatife.

HE GENUS OF HABIT, or rather CXIV. OF BEING HABITED, is of fo little importance, when compared to the other Predicaments, that perhaps it might be omitted, were it not in deference to antient authority (a).

Tho' it have respect both to Habits, which are worn, and to Persons who wear them; yet is it not recognized ei-

⁽a) The Authority alluded to is that of the Pythagoreans and Peripatetics.

C.XIV. ther in the one or the other, but is a RELATION, which arises from the two taken together (b).

> Now as every fuch Habit, as well as every fuch Wearer, are both of them Substances, the Relation must necessarily be a Relation, existing between Substances. It cannot therefore be the Relation existing between Mind and it's Habits (such as Virtue or Science) nor that between Body and it's Habits (fuch as Agility or

⁽b) Quod non ita intelligendum est, ac si res ipsæ, quæ sic habentur, sint hujus Prædicamenti (puta Vestitus ipsi, &c.) quæ ad alia Prædicamenta spectant, sed HABITIO harum, seu IPSUM HABERE, το έχειν ταυτα. Wallis. Logic. 1. i. c. 14.—Soon after he explains HABITIO, and informs us it means, Vestitum esse, Tunicatum esse, Togatum esse, Corona cingi, Calceo indui, &c.

Sanderson in his Logic explains the Predicament as follows-Corpus habens est Substantia; Res habita ferè est Forma artificialis de quarta Specie Qualitatis; AP-PLICATIO HUJUS AD ILLUD est HABITUS hujus Prædicamenti. Lib. i. c. 14.

Health), for these Habits are not Sub- C.XIV. stances, but inherent Attributes (c).

AGAIN, it cannot be the Relation existing between a Man and his Possessions; for, tho' these are both of them Substances, and tho' a Possession may be said to have an Estate, he cannot be said to have it upon him; he does not wear it (d).

⁽c) Simplicius, when he gives the reason, why Habit and the Body-Habited cannot co-exist, as Substance and it's Attributes co-exist, says—συμφυν γάς ταῦτά ἐςι, κό αὐτὸ ἐκεῖνο—For these Attributes are con-natural [that is, grow with the Being] and are the Being it-self. Simplic. in Præd. p. 93.

⁽d) Διο κόξε τα κτήματα, η ανδράποδα, η Φίλες, η ωάτερας, η υίεις κατα τέτο το γένω έχειν λεγόμεθα, διότι κα εν ωεριθέσει ταῦτά εςι, καίτοι κτήματα έντα.—For which reason we are not said, in the sense of this Genus, το Have Possessions, or Slaves, or Friends, or Fathers, or Children; for these none of them are said to exist in their being Thrown Round us, or superinduced, altho they are all [in some sense or other] our Possessions. Simplic. ut suprá.

C.XIV. THE being Habited therefore is in it's frictest Sense something less than the first Relation, that between a Substance, and it's Attributes; something more, than the second Relation, that (I mean) between a Possessor, and his Possessor (e).

'Tis to be hoped that these Reasonings on a subject so trite, will be pardoned for their Brevity. They are to shew, not

⁽e) — η ἐρίκε μέσον τῶς εἶναὶ τὸ ἔχειν, τε κεκτῆσθαι, ης τε καθ' ἔξιν διακεῖσθαι. ἢ μὲν γὰς ἔχεῖαι, ὡς
ἡ λευκότης. χωρίζεται ἀπὸ τῶν ἔξωθεν κτημάτων, ὰ ἐ
περικείμεθα. ἢ δὲ σωματικόν ἐςι ης ἔξωθεν, χωρίζεται
ἀπὸ τῶν ἔξεων, αὶ συμβεβήκασιν ἡμῖν, συμφυεῖς ἔσαι,
ης ἐκ ἐπίκτητοι—ΤΗΕ HAVING ANY THING ON appears to be à fort of Medium between Possessing, and
the being HABITUALLY DISPOSED. As far as it is
bad, after the same manner as Whiteness is had, [or any
inherent Attribute,] it is distinguished from Possessing
without, with which we are not said to be inveloped
or cloathed. As far as it is corporeal, and FROM WITHOUT, it is distinguished from [inherent Attributes or]
Habits, which belong to us, as things con-natural,
and not as things adventitious. Simplic. ut suprá.

what the Relation is, but what it is C.XIV.

If it be demanded—And what then is it?—the Answer must be, It is a Re-LATION existing after a peculiar manner; when an ARTIFICIAL SUBSTANCE is SU-PERINDUCED (f) upon a NATURAL ONE, and becomes contiguous to it, tho' it be not united in vital Continuity.

Such was THE VERY ARMOUR HE HAD

When he th' ambitious Norway combated (g).

THE primary End of being habited feems to have been PROTECTION; and that, either by way of defence against the inclemencies of *Nature*, as in the case of common Apparel; or by way of defence,

⁽f) See the preceding Notes in this Chapter, particularly the second.

⁽g) Hamlet, Act i. Sc. 1.

C.XIV. against Infults, as in the case of Helmets, Breast-plates, Coats of Mail, &c.

FARTHER than this, as Habits were various both in their materials and shapes; and, as among the number of those who wore them, some were superior to the rest by their Dignity and Office: hence it was sound expedient, that many of these superior Ranks should be marked by THE DISTINCTIONS OF PECULIAR HABITS; so that this established another End of being Habited, over and above Protection, an End, which gave Robes to Peers, Uniforms to Admirals, &c.

FARTHER still, some Regard, when either of the sexes habited themselves, was had to Decency; some to Beauty and Adventitious Ornament; of which last we may be more sensible, if we contemplate the elegant draperies of the Grecian Statues, or those in the capital

pital Pictures of the great Italian Maf- C.XIV. ters, and compare these truly graceful and fimple Forms to the tasteless and ever mutable ones of ourselves, and our neighbours (h).

As there are many forts of Habit, which have respect to this last End, I

The following Anecdote, communicated to me by the late Lord Lyttelton, appears to be worth preferving. When Sir John Vanbrugh had finished Blenheimhouse, the then Duchess of Marlborough asked him for the Plan of a Garden. Sir John told her, he could give no Plan himself, and he feared she might apply to others, as incapable as he was, naming certain Gardeners of the time, that are now unknown. But, continued he, if your Grace would have a Garden truly elegant, you must apply for a PLAN to THE BEST PAINTERS OF LANDSCAPE.

So happily did this ingenious man predict (as it were) a Taste, which, taking it's rise not many years after from Kent, has been fince completed by Brown, and no where with greater beauty and magnificence, than on the very Spot, of which we are now writing, I mean Blenheim.

⁽h) The fame Simplicity, which contributes to the Decoration of our Persons, contributes also to the Decoration of Nature.

C.XIV. mean to Beauty or adventitious Ornament; fo when a man is found to cultivate this End to an excess, it constitutes the character, which we call a Fop (i). Nay, even the Conveniences of Drefs, when too minutely studied, degenerate into an effeminacy, which carries with it a reproach. 'Twas hence that Turnus upbraided the Trojans for wearing a Covering over their hands, and for tying their Caps on with Strings, that is to fay in modern language, for ufing Gloves and Chinftays.

> Et tunicæ manicas, et habent redimicula mitræ(k).

⁽i) Horace, in the first satire of his first book, calls the wild and extravagant Nævius, by the name of VAPPA; which Baxter ingeniously explains, quod insano sumptu stolidas sequeretur delicias. Nos bujuscemodi homunciones FOPPs dicimus; an et hoc a VAPPA. quærant alii.

VAPPA meant originally the Juice of the Grape in a state of perfect insipidity, when 'twas neither Wine, nor Vinegar. VAPPA proprie dicitur, quod nec vinum, nec acetum est. Vet. Scholiast, in Horat. Satir. 1. i. S. 2. v. 13.

⁽k) Æn. ix. 616.

WE have already mentioned the Use C.XIV. of Habit as to Distinction. In almost all Countries something of this hath taken place, to distinguish the Noble from the Ignoble; the Scholar from the Mechanic; to mark the Sacerdotal, the Military, the Juridical, &c. 'Tis to the Fallibility, which sometimes attends this method of distinguishing, that we owe those proverbial Sayings, THE CLOAK makes not the Philosopher; THE COWL makes not the Monk (1).

'Tis in a Sense less strict and precise, that we take the word HABIT, when we say of the Plains, they are cloathed with Grass; of the Mountains, they are cloathed with Wood; and more remotely still, when we apply the Notion of Habit to the MIND—Having on the

⁽¹⁾ Pallium non facit Philosophum--Cucullus non facit Monachum.

C.XIV. BREAST-PLATE of Righteousness—taking the Shield of Faith (m), &c.

In the Language of Poetry there is fometimes much elegance derived from this Arrangement; as for example, when the Morn, at day-break, is faid to be clad with Russet Mantle; or when the Moon, in diffusing her pallid light, is faid to throw o'er the dusk her silver Mantle (n); or when the Psalmist says, on a greater subject, Thou deckest thyself with Light, as it were with a Garment (o).

Tho' from all these instances we may perceive the force of this Genus, yet another still remains, I mean the force of it's PRIVATION. Nakedness is found to heighten other circumstances of Distress:

⁽m) Ephesians, ch. vi. v. 14, 16.

⁽n) Hamlet, A& i. Sc. 1 .- Par. Lost, iv. 608.

⁽o) Pfalm civ. v. 2.

Nubus in ignotâ, Palinure, jacebis a- C.XIV. renâ (o).

Tho' the Sense be metaphorical, yet Shakespeare avails himself of the same Privation in the pathetic Speech, which he gives to Wolsey:

O! Cromwell, Cromwell!

Had I but serv'd my God with half the zeal

I ferv'd my King, he would not in mine age Have left me NAKED to my enemies (p).

THE same Privation has it's effect also in a way more Comic, and contemptuous. 'Tis thus Aristophanes talks about Philosophers:

Τές ώχριῶντας, τές ἀνυποδήτες λέγεις (r).

⁽p) En. v. 871.

⁽q) Shakes. Henry VIII. Act iii. Sc. 6.

⁽r) 'Agisop. Nep. 103.

C.XIV. You mean those pallid, those BAREFOOTED fellows.

'Trs thus the Author of the Dunciad describes Friars—

Grave mummers, sleeveless some, and shirtless others (s).

In some instances, such partial Privations of Habit become an indication of Reverence. Thus Moses, when on holy ground, was ordered to stand barefooted (t); and among Europeans 'tis a mark of Respect, to appear bareheaded.

AND so much for THE GENUS OR PRE-DICAMENT OF HABIT, which we divide into Species from it's different Ends

⁽s) Dunciad. iii. 113.

⁽t) Exod. iii. 5.

of PROTECTION, DISTINCTION, DE-C.XIV. CENCY, and ORNAMENT, to all of which is alike opposed their Contrary, PRIVATION. So much also for the TEN UNIVERSAL ARRANGEMENTS, GENERA, or PREDICAMENTS, with the discussion of which we conclude the Second, or middle Part of this Treatise.

Aa4 CHAP.

C H A P. XV.

Concerning the Appendages to the Universal Genera or Arrangements; that is to say concerning Opposites, Prior, Subsequent, Together or At once, and Motion, usually called Post-Predicaments—the Modes or Species of all these (Motion excepted) deduced, and illustrated—Preparation for the Theory of Motion.

C. XV. TAVING now gone thro' each of the Predicaments or Philosophical Arrangements, and confidered it's Character, and distinguishing Attributes, there remains nothing farther to complete the Theory, but an Explication of certain Terms, which have occasionally occurred; and which, from their subsequent place, and subsequent Contemplation, have been called by

the Latin Logicians POST-PREDICA- C. XV. MENTS (a), and form the third, or last Part of this Treatise.

Thus for example, things have been fometimes mentioned in the former part of this Work, as opposed to one another; and hence it becomes expedient to confider the Doctrine of Opposites (b).

AT other times things have been treated as being some Prior, some Subsequent, and others existing Together or AT once (c); and hence it becomes expedient to examine these several Terms, and to investigate the different meanings, of which each of them is susceptible.

⁽a) See before, p. 35, 36.

⁽b) See before ch. vii. and ch. viii. p. 173. See also Arist. Præd. των ΑΝΤΙΚΕΙΜΕΝΩΝ, p. 47. Edit. Sylb.

⁽c) See before, p. 181, 182, 221. See Arist. Prædic. weel re AMA. p. 54. Edit. Sylb.

C. XV. LASTLY, MOTION in it's various Species is so widely diffused thro' some of the most important Genera already treated, that it cannot be omitted in a speculation, where the professed End is to scrutinize Universals.

IT appears therefore that there still remain, as Subjects of our Inquiry, Opposites, Prior and Subsequent, Coexistent or At once, and last of all Motion.

Now in the first place, as to Opposites, the Reader must be reminded, that, having already spoken of them in a former Treatise (d), we omit them here, and refer to that.

THE

⁽d) See Hermes, l. ii. c. 2, Note (i) p. 250, in which Note are enumerated Relatives, τὰ ωρός τι; Contradictories, τὰ ἐναντία; Contradictories, τὰ κατὰ ἀπόφασιν κὰ κατάφασιν. There is one Species omitted,

THE Doctrine (e) of PRIOR and SUB- C. XV. SEQUENT follows: and these perhaps may appear to be fufficiently discussed, if we enumerate, and explain the following Modes.



THE MOST OBVIOUS MODE of PRI-ORITY is the TEMPORAL (f), according

omitted, τὰ καθ' έξιν κή σέρησιν, things opposed in the way of HABIT and PRIVATION; fuch as Sight and Blindness.

This Privation differs from that mentioned already in the third Chapter of this Treatife, because the Privation there is the road to natural Productions; the Privation here admits no Progress, nor any Return to the original Habit, at least in a natural way. See Ammon. p. 146, and of this Work, p. 56, 57, &c.

- (e) See Arift. Prad. High To HPOTEPON. p. 53. Edit. Sylb.
- (f) This Mode Aristotle calls PRIOR κατα του χράvov, ACCORDING TO TIME; the Priority, depending on the Quantity of Time being larger with respect to the Subject, which is called older, or more antient-

C. XV. ing to which we fay, that the Trojan Wars were prior to the Punic, and the Battle of Marathon to that of Blenheim.

A SECOND MODE of PRIORITY is, when a thing is *prior* to some other, because it does not reciprocate in the consequence of Existence (g).

τῷ γὰς του χεόνου ωλείω εἶναι, κὰ ωαλαιότεςου κὰ ωρεσθύτεςου λέγεται. Præd. p. 53. Edit. Sylb.

Ammonius, in commenting this Passage, observes an elegance in the Greek tongue, peculiar to itself—Παλαιότερου, he tells us, is applied indiscriminately to Beings animal and inanimate; Πρεσθύτερου is applied only to the animal Genus. Simplicius on the same occasion makes the same Observation, in Præd. p. 106.

The last Author has also the following remark concerning the different Modes of Temporal Priority—
Τὰ δὲ κατὰ χεόνον ωρότερα, ἐπὶ μὲν τῶν γενομένων τὰ ωρρφώτερον ὅντα τὰ Νῦν ἐπὶ δὲ τῶν ἐσομένων, τὰ ἐῖγύτερον. Simpl. in Præd. p. 106. B. Things PRIOR IN TIME among the PAST are those the FARTHEST from the PRESENT NOW; among the FUTURE, are those the NEAREST to it. Simpl. in Loc.

(g) The Words in Aristotle are—το μη αντισφέφου κατά την τε είναι ακολέθησιν. Prædic. p. 53. Edit. Sylb.

He

A FEW examples will illustrate the C. XV. apparent difficulty of this character. The number One according to this doctrine is prior to the number Two, because if there exist Two, 'tis a necessary consequence that there should be One; but if there exist One, it does not reciprocate, that there should be Two. Thus every Genus is prior to any one of it's various Species, because if there be fuch a Species as Man, or Lion, there is necessarily fuch a Genus as Animal; but if there be fuch a Genus as Animal, there is not necessarily fuch a Species as Man, or Lion.

This Mode of Priority, which we call PRIORITY ESSENTIAL, will be found of great importance in all logical Disquisitions, and may therefore perhaps merit some farther attention.

He alleges the fame Instance from Numbers, which is given here.

C. XV.

According to this, that thing of any two or many things is PRIOR, which, by being taken away, annihilates the rest; or which, if the rest ARE, must necessarily BE (h).

For example—If there were no Theorems of Science, to guide the Operations of Art, there could be no Art; but if there were no Operations of Art, there might still be Theorems of Science. Therefore is Science PRIOR to Art. Again, if there were no fuch Things as Syllogized Truths, there could be no fuch Sciences as Optics or Astronomy. But, tho neither of these, there might notwithstand-

⁽h) What is here faid, is explained in what immediately follows. Simplicius fays, agreeably to the explanation here given, καλεῖν δὲ ἐνώθασιν οἱ νεώτεροι τὸ τοιῦτον Πρότερον, συνεπιΦερόμενον μὲν, μὴ συνεπιΦέρου δὲ, κὰ συναναιρεν μὲν, μὴ συναναιρεκίνου δὲ.—The latter Logicians are accustomed to call this Mode of Priority, that which is CO-INFER'D, but does NOT CO-INFER; that which CO-ANNIHILATES, but is not CO-ANNIHILATED. Simpl. in Præd. p. 106.

ing be fuch things, as Truths Syllogized. C. XV. Therefore is Logic PRIOR to these, and, by parity of reasoning, to every other particular Science. Again, if there were no such Principles as Self-evident Truths, there could be no fuch things as Truths Syllogized. But, tho' no Truths Syllogized, there might still be Truths selfevident. Therefore the FIRST PHILOSO-PHY, which treats of these primary and original Truths, being PRIOR to Logic, is PRIOR also to the tribe of Sciences, as are these to the tribe of Arts; so that of course the whole structure of Logic, of Sciences, and of Arts, may be said to rest upon this FIRST PHILOSOPHY, as upon that only firm and solid Base, against which the Powers of Ignorance and Sophistry can never totally prevail.

THERE is a THIRD MODE OF PRIOR-ITY, seen in Order and ARRANGEMENT. Thus in the demonstrative Sciences, Definitions and Postulates are PRIOR to TheoC. XV. re

rems and Problems; in Grammar, Syllables are PRIOR to Words, and Letters to Syllables. 'Tis thus in a well composed Oration, the Proëme is PRIOR to the State and Argument; and these last, to the Peroration (i).

A FOURTH MODE OF PRIORITY is that of Honour and Affection, when we prefer Objects, that we revere or love, to others that less merit, or at least that we esteem less to merit our Regard and Attention (k).

'Αθανάτες μεν ωρώτα θεες, νόμω ως διάκειν]αι, Τίμα·—ἔπειθ' Ήρωας ἀγαυές·

T85

⁽i) Τρίτον δε κατά τινα τάξιν τὸ πρότερον λέγεται, καθάπερ ἐπὶ τῶν ἐπιςημῶν κὰ τῶν λόγων ἔν τε γὰρ ταῖς ἀποδεικτικαῖς ἐπιςήμαις, κ. τ. λ. Arift. Præd. p. 53. Edit. Sylb. This is not translated, being expressed in the Text.

⁽k) "Ετι ωαρά τὰ εἰρημένα τὸ βέλτιον κὰ τιμιώτερον ωρότερον τῆ Φύσει δοκεῖ εἰώθασι δὲ οἱ ωολλοὶ τὰς
ἐντιμοτέρες κὰ μᾶλλον ἀγαπωμένες ὑπὰ αὐτῶν, ωροτέρες ωαρὰ αυτοῖς Φάσκειν εἶναι— Arift. Præd. Ibid.—
not translated for the reason before given.

ARRANGEMENTS.

369

Τές τε καταχθονίες σέδε δαίμονας, έννομα βέζων C. XV. T''s $\tau \in \gamma$ ove $i \in \tau$ ina, $\tau \in \tau$ and $i \in \tau$ experaint as (l),

и. т. Л.

The Gods immortal, as by Law divine They stand arrang'd, FIRST honour: NEXT revere

Th' illustrious Heroes, and terrestrial Race Of Genii, paying each the legal Rites: Honour thy Parents NEXT, and those of kin

The nearest, &c.

HIEROCLES, in his comment on these verses, commonly called for their excellence the Golden Verses of Pythagoras, has largely expatiated on this divine Precedence and Subordination.

Thus Horace, with respect to that Priority of Beings, founded on the Religion of his Country—

⁽¹⁾ Pythag. aurea carmina.

37° C. XV. PHILOSOPHICAL

Quid PRIUS dicam solitis Parentis Laudibus—— &c.

Proximos illi tamen occupavit

Pallas honores (m).

He adopts PRIORITY, derived from the fame principle, when he speaks of the favourite topics, which his Genius led him to cultivate:

Quid PRIUS illustrem satiris, musâque pedestri (n) ?

THE Stagirite, who records these various Modes of PRIORITY, observes on this fourth Mode (and apparently with reason) that it was in a manner the most alien and foreign of them all (0).

⁽m) Horat. Od. 1. i. 12.

⁽n) Horat. Sat. 1. ii. 6. v. 17.

⁽⁰⁾ His Words are—ἔς: δὲ δη το χέδον αλλοτριώτωτ Των τρόπων ἔτω—Arift Frad Ibid. p. 54.

HE mentions also a FIFTH MODE, C. XV. but he introduces it with a sort of doubt.

It should seem (p), says he, besides the Modes here mentioned, there was another Mode of PRIORITY even in things reciprocating; altho, so far as they reciprocate, they may be said to co-exist.

THE fact is, if either of them in any fense can be called CAUSE to the other, it may for that reason be called PRIOR, if not in Time, at least in Efficacy and Power.

For example, the actual Existence of a Man reciprocates with the Proposition, which affirms him actually to exist. For if the Man actually exist, then is the Proposition true; and reciprocally, if the

⁽p) Δόζειε δ' αν κ ταρα της είρημενης έτερω είναι τε προτέρη τρόπω των γαρ αντισρεφόντων το AITION, κ. τ. λ. Ibid. p. 54.

C. XV. Proposition be true, then does the Man actually exist. And yet, the these things in this manner reciprocate, is not the Proposition Cause to the Man's Existence, but the Man's Existence to that of the Proposition; since according as the Man either is or is not, in like manner we call the Proposition either true or false (q).

This last Mode of *Priority* we call Causal Priority, or the Being Prior By Causality.

WE must not however quit this Speculation, without observing that Cause and Effect do not always thus reciprocate, but that for the greater part the Cause is naturally PRIOR. For example: Hunger and Thirst are the natural Causes of Eating and Drinking; and thus, by being their Causes, are naturally prior to

⁽q) The Words of Aristotle are—τῷ γὰς εἶναι τὸ ωςαγμα ἢ μὴ, ἀληθὸς ὁ λόγ, το ἡ ψευδης λέγεται.—
Ibid. p. 54. Edit. Sylb.

them. Crimes too are the natural Cause, C. XV. why Punishments are inflicted; and therefore Crimes, by parity of reason, are prior to Punishments. The Sentiment, tho' obvious, is well expressed by Pætus Thrasea. Nam Culpa quam Pæna TEMPORE PRIOR EST; emendari, quam peccare, posterius est (r).

Nor are Crimes only prior to Punishment, but so is Judicial Process; since to punish first, and then to hear, is what Sir Edward Coke chuses to call (in a language somewhat strong) the damnable and damned Proceedings of the Judge of Hell (s):

Castigatque, auditque dolos- (t).

AND thus it appears there are FIVE PRINCIPAL MODES OF PRIORITY; that

⁽r) Tacit. Annal. xv. 20.

⁽s) Coke's Institutes, vol. ii. p. 54, 55.

⁽t) Eneid. vi. 567.

C. XV. is to fay, the TEMPORAL, the Essen-TIAL, that of ORDER, that of PRECE-DENCE, and that of CAUSALITY; which five being known, THE Modes of WHAT IS SUBSEQUENT (it's natural opposite) are easily known also (u).

WE are now to examine the Modes of Co-EXISTENCE, or that of being AT ONCE and TOGETHER (x); and these Modes have evidently great connection with the preceding.

THE most SIMPLE Mode among these, as well as among the Modes of Priority, is the TEMPORAL, perceived in things or events, which exist during the same time (y).

⁽u) — δήλου δε ότι όσαχῶς τὸ ωςῶτου, τοσαυ]αχῶς αν κς τὸ υς ερου λέγοιτο. Simplic. ut supra, p. 106. B.

⁽x) Aristot. Præd. p. 54. Edit. Sylb.

 ⁽y) — ων ή γένεσις ἐν τῷ αὐτῷ χρόνῳ – Prædic. p.
 Edit. Sylb.

UNA Eurusque Notusque ruunt—— (z) C. XV.

-OMOΥ σόλεμός τε δαμά η λοΐμος Αχαιές (a).

War and the Plague AT ONCE destroy the Greeks.

Persons, in this manner co-existing, are called Contemporaries: such as Socrates and Alcibiades; Virgil and Horace; Shakespeare and Johnson.

A SECOND MODE OF CO-EXISTENCE is founded in NATURE and ESSENCE, where two things necessarily reciprocate in consequence of their existing, while neither of them at the same time is the Cause of existence to the other (b).

'Tis

⁽z) En. i. 89.

⁽a) Hiad. A. v. 61.

⁽l) Thus expressed by Aristotle—Φύσει δε AMA, δσα ἀντις ρέφει μεν κατὰ τὴν τὰ εἶναι ἀκολέθησιν, μη-δαμῶς δε αἴτιου Βάτερου θατέρω τὰ εἶναι. Præd. p. 54. Edit. Sylb.

376

C. XV.

'Tis in this sense that Double and Half are TOGETHER or AT ONCE, for they reciprocate; if there be Double, there must be Half; and if Half, there must be Double. They are also neither of them the Cause, why the other exists. Double is no more the Cause of Half, than Half is of Double. This last condition is requisite, because if either of the Two were essentially and truly a Cause to the other, it would pass, by virtue of it's Causality, from Co-existence to Priority (c).

THERE is A THIRD MODE OF Co-EXISTENCE, seen in different Species of the fame Genus, when, upon dividing

By referring to the Chapter on Relatives, it is easy to perceive, whence this Speculation arises; for in that Chapter the same Example is alleged as here, by way of illustration of the same Doctrine. See before, p. 221.

⁽c) See before, p. 371, 2.

the Genus, we view them arranged to- C. XV. gether, contra-distinguished one to another (d).

'Tis thus the Genus, Triangle, being divided into equilateral, equicrural, and scalene, no one of these Species appears to be by nature prior, but all of them TO EXIST AT ONCE in a state of Contradistinction. The same may be said of the three animal Species, the aerial, aquatic, and terrestrial, when we divide, after the same manner, the Genus Animal (e).

AND thus are the *Modes* of Co-EXIST-ENCE or TOGETHER either the TEM-

⁽d) Thus expressed by Aristotle—κ τα εκ τε αὐτε γένες ἀντιδιηρημένα ἀλλήλοις ΑΜΑ τῆ Φύσει λέγελαι—
Ibid. 55.

⁽ε) — ἀντιδιηρῆσθαι δὲ λέγεται ἀλλήλοις τὰ κατὰ την αὐτην διαίρεσιν οῖον τὸ ᢍΊηνον τῷ ᢍεζῷ κὰ τῷ ἐνύδρω—Ibid. 55.

C. XV. PORAL, the ESSENTIAL, or the Specific.

AND here, should any one object to these Distinctions, as either too trivial or too scholastic for the purposes of a polite writer; we answer, that we no more wish an author to mention them, when not professedly his subject, than we would have him differt, without a cause, upon nouns, pronouns, and the principles of Grammar. All we hope from these elementary Doctrines, is to see them in their Effects; to fee them in the accuracy of the composition, both as to reasoning and language. 'Tis thus a grazier, when he turns his oxen into some rich and fertile pasture, never wishes to inspect what food they have devoured, but to fee a fair and ample Bulk, the effect of food well digested. Besides, when Sophists affail us, and either exhibit one thing for another, or two things for one and the same; to what surer weapon can we recur for defence, than to C. XV. that of precise and well-established Distinction (f)?

THERE remains to be treated the Theory of Motion; in which, without attempting to impeach or contradict any modern Speculations, we shall inquire, what was the opinion of the Ancients concerning it; in what manner they attempted to catch it's fugitive nature; and how they divided it by it's Effects into it's subordinate Species.

⁽f) Learning and Science, or rather learned and scientisic Terms, when introduced out of Season, become what we call PEDANTRY. The Subject may have merit, the Terms be precise, and yet, notwithstanding, the Speaker be a PEDANT, if he talk without regard either to Place, or Time.

The following story may perhaps illustrate this Affertion. "A learned Doctor at Paris was once pur-"chasing a pair of stockings, but unfortunately could "find none, that were either strong enough, or thick "enough. Give me, says he to the Hosier, flockings "of Matter Continuous, not of Matter discrete." Menagiana, tome ii. p. 64.

C.XV. But this is a Theory demanding a feparate Chapter, where those, who question the doctrines, may perhaps amuse their curiosity, while they peruse an attempt to exhibit the sentiments of Antiquity upon so singular a subject; a subject, in it's existence so obvious, in it's real character so abstruce.

C H A P. XVI.

Concerning MOTION PHYSICAL—It's various Species deduced and illustratedblend themselves with each other, and why - Contrariety, Opposition, Rest-Motion Physical—an Object of all the Senses-Common Objects of Sensation, how many-Motion, a thing not simple, but complicated with many other Things -it's Definition or Description taken from the Peripatetics—the Accounts given of it by Pythagoras and Plato analogous to that of Aristotle, and why.

LL Motion is either Physical, or CXVI. A NOT PHYSICAL. As by MOTION PHYSICAL I mean that, which is obvious to the Senses, so by Motion not Phy-SICAL, I mean that, which, by being the object of no sense, (as for example

C.XVI. the Succession of our Thoughts and Volitions) is the Subject of after contemplation, and knowable not to the Sensitive, but to the rational Faculty.

This therefore will be the Plan of our following Inquiry.

In the present Chapter we shall confider Motion Merely Physical, both in it's several distinct Species, and in it's general or common Character.

In the next Chapter we shall inquire whether there be OTHER MOTION BESIDES; and if such may be found, we shall then examine, how far it is distinguished from the Physical, and how far it is connected.

FIRST therefore for the first (a).

⁽a) In the Order of Nature the Genus precedes it's feveral Species; but in the order of Human Perception the feveral Species precede their Genus, which last is the order adopted here. See Hermes, p. 9.

As the most obvious of all Motions is C.XV the Motion of Body, so the most obvious Motion of Body is that, by which it changes from Place to Place (b), itself remaining, or at least supposed to remain, both in one Place and the other, precisely the same. 'Tis thus a Bowl moves over a Plane; a Bird thro' the Air; a Planet round the Sun. This Motion is properly Motion Local; or, if we chuse a single Name, we may call it Passage or Transition. It's peculiar character, as opposed to any other Motion, is to affect no Attribute of Body, but merely that of Local Site.

Cæruleo per summa levis volat æquora curru, Subsidunt undæ, tumidumque sub axe tonanti

⁽b) Called therefore in Greek ή κατα τόπου μεταξολή, and fometimes by a fingle word, Φορά. See Arist. Prædic. p. 55. Edit. Sylb. and Ammon. in Loc. p. 171. B.

C.XVI. Sternitur æquor aquis; fugiunt vafto æthere nimbi (c).

> Here the Chariot flies, the Waves sub-- fide, the Clouds disperse, all is in LOCAL MOTION.

THERE are other Motions, which affect the more inherent Attributes. Thus when a lump of Clay is moulded from a Cube into a Sphere, there is Motion more than local; for there is the acquisition of a new Figure. The same happens, when a man from hot becomes cold, from ruddy becomes pale. Motion of this Species has respect to the Genus of Quality, and (if I may be permitted to coin a word) may be called ALIATION (d).

If thou be'st He! but O! how fal'n, how CHANG'D

From Him, who in the happy realms of light,

⁽c) Æn. v. 819.

⁽d) 'Αλλοίωσις, in barbarous Latin, Alteratio. Vid. Arift. ut suprà. Cloath'd

Cloath'd with transcendent brightness, didst C.XVI.

Myriads, tho' bright -- (e).

Here we behold Qualities that are changed, a Scene of ALIATION.

ANOTHER SPECIES OF MOTION is feen in Addition and Detraction; as when we either add, or take away a Gnomon from a Square. Here is no Aliation, of Change of Quality, (for the Figure, as a Square, remains the fame in either case) but the Effect of fuch Motion is a Change only in the Quantity, as the Square becomes either smaller or larger. When Quantity is enlarged, we call the Motion Augmentation; when 'tis lessend, we call it DIMINUTION (f).

Behold a wonder: They, but now who feem'd In BIGNESS to furpass Earth's Giant Sons,

⁽e) Par. Lost, i. 84. See p. 174.

⁽f) Augmentation, Augnots-Diminution, Melwott. Vid. Arift. ut sup.

C.XVI. Now LESS than smallest Dwarfs, in narrow room

Throng numberless—— (g)

Here we behold DIMINUTION.

PARVA metu primo; mox sese ATTOLLIT IN AURAS,

Ingrediturque solo, et caput inter nubila condit (h).

Here we behold AUGMENTATION.

ALL these Motions have this in common, that they are Changes or Roads from one Attribute to another (i), while the Substance remains the same, both in Effence and in Name. Thus the Planet Jupiter, which was a year ago in such

⁽g) Par. Loft, i. 777.

⁽h) Æn. iv. 176. See chap. ix. where the Species of Quantity are enumerated.

⁽i) Οὐ κατηδορίαι εἰσὶν, ἀλλ' ὁδὸς εἰς τὰς κατηδοeias-They (that is, these several Species of Motion) are not Predicaments, but a ROAD to the Predicaments. Ammon. in Præd. 171.

a part of the heavens, and is at present C.XVI. in another, tho' his Attributes of Place are changed, is yet both in Essence and in Name still the same Planet. By parity of Reason, 'tis the same individual Man, who, by change in Quantity, from sleshy becomes emaciated (k).

Bur

(k) Speaking of these Species of Motion, Ammonius says—κινεῖσθαι ἢ κατὰ Ποσὸν, ἢ κατὰ Ποιὸν, ἢ κατὰ Τόπον, Φυλάτθοντα τὸ ἐξ ἀρχῆς ἐσιῶδες Εἶδὸ—
That things are moved and changed either in QUANTITY, or in PLACE, still preserving [during these Motions] their ORIGINAL ESSENTIAL FORM. Ammon. in Præd. p. 172.

Here we find the Phrase Eid 2016 2016 commonly called Substantial Form, but which we chuse (as thinking it more accurate) to translate Essential. To explain—Let us for example call Sphericality (if we may employ such a word) the Essential Form to a Bowl. Every one will admit that the Bowl may undergo many Changes; may become White from Black, Hot from Cold; and (by a more easy Change than these) it may roll from one Place to another; and yet notwithstanding it may still continue to be a Bowl. But when it's Sphericality, that is to say it's Eid 2016 2016, it's essential Form departs, when supposing it's Matter to be Clay) it is moulded from Ce 2

CXVI.

Bur there are other Motions, which in their Effects go farther. Thus when the Substance of a Man becomes not only pallid and emaciated, but it's living Principle is detached from that which it enlivens, Putrefaction and Dissolution of the Body enfue, and 'tis no longer a Change within the Substance, but the very Substance is lost both in Essence and in Name (1). Such Motion is called Cor-RUPTION, DISSOLUTION, or DYING. On the contrary, when the Seed of any Species, whether Animal or Vegetable, by Evolution, Accretion, or other latent Process of Nature, produces a certain Being, which had no existence before; 'tis a Change, like the former, that goes not merely to Attributes, but by a more efficacious Operation to the very Substance

a Sphere into a Cube, from that instant the Bowl is no more, it has no longer an existence either in Essence, or in Name. See before, p. 90.

⁽¹⁾ See the Note immediately preceding.

itself. Such Motion is called Gene- C.XVI.
RATION OF BIRTH.

THE following difference subsists between these two latter Species and the former; the former are no more than Roads to different Modes of Being; the latter lead to Being itself, and to it's opposite Non-being (m).

However separate and distinct these Species of Motion may be found, yet being all of the same Genus, they naturally blend themselves together.

⁽m) Hence Generation is called - Oδος ἀπο τε δυνάμει ὄντω μη ὄντω εἰς το ωπο ον, τετές εν ἀπο τε δυνάμει ὄντω εἰς το ἐνεργεία ὄν— The Road from Non-Being to Being; that is, from Being in Power to Being in Act—Corruption or Dissolution, on the contrary, is called 'Οδος ἀπο τε ὄντω εἰς το μη ὄν— The Road from Being to Non-Being. Ammon. in Præd. p. 172.

The Particle Tn, prefixed in the Quotations to un dut Sur S., and to du, is to diffinguish the Non-being and Being here mentioned from Being and Non-being absolute. In means in a manner, as it were, after a fort. See below, 397, 398.

C.XVI.

Thus the Local Motion may possibly exist without the rest, yet 'tis impossible for the rest to exist without Local Motion. Generation is the Assemblage of parts; Corruption, the Separation; so that here Local Motion is evident in either case. 'Tis the same in Aliation; the same in Augmentation and Diminution. When Fear renders a person pale, such Change could not be, did not his Blood retreat locally from the surface to within: and as for Augmentation and it's Opposite, they are no more than the bringing to, and the carrying off; both which in their very Idea imply Local Motion.

THE other Species of Motion are incidentally blended also. He that increases in bulk, commonly increases with ruddiness; and he that lessens in bulk, commonly lessens with Paleness. There are both in the Qualities and the Quantities of the particles to be assembled, many Changes

Changes necessarily previous to Gene- C.XVI. ration or Birth; and many others, as necessarily previous to Corruption or Death (n).

AND thus have we established SIX SPE-CIES OF MOTION, which we denominate Physical, because they respect Physical Subjects. They are to be found in four of the Universal Genera, or ARRANGEMENTS; one in the Genus, Where, TRANSITION; one in Quality, ALIATION; two in Quantity, Aug-MENTATION and DIMINUTION; two in Substance, GENERATION and CORRUP-TION.

⁽n) See Aristot. Phys. 1 viii. c. 8.—where he shews at large that Local Motion is necessarily the primary Motion, as running thro' the rest, and effential to them all; and where he likewife explains in what manner the other Species of Motion necessarily blend themselves with each other. The Chapter is too long to be here transcribed. In his Tract de Anima, 1. i. c. 3. having spoken of the several Species of Motion, he adds, that Motion infers Place—waσαι γαρ αί λεχθείσαι πινήσεις εν τόπω-For that ALL THE MOTIONS here enumerated are in PLACE.

C.XVI.

In all these Motions there is Opposi-TION OF CONTRARIETY (0). Where two Species are coupled in one Genus, the two Species themselves are, in such case, Contraries; as Generation and Corruption, Augmentation and Diminution. Where the Species stands fingle, as Local Motion, or Aliation, the Contrarieties are more numerous, and therefore perhaps not mentioned. In Local Motion we behold Backward and Forward, Rectilinear and Curvilinear, Centripetal and Centrifugal, &c. In Aliation, or Change of Quality, we behold Blackening and Whitening; Straightening and Bending; Strengthening and Weakening; with many others, to which names are wanting. Laftly, all Motion whatever is contrary to Rest (p).

⁽⁰⁾ See the Chapter preceding, p. 361.

⁽p) 'Esì δὲ ἀπλῶς τῆ μὲν κινήσει ἡςεμία ἐνάντιον—. In strictness the Contrary to Motion is Rest. Arist. Prædic. c. xi. p. 56. Edit. Sylb.

AND now perhaps it may not be a- C.XVI, miss to inquire, what Physical McTION is. Some Philosophers have found a short method here, by telling us, 'tis a simple Idea, and therefore cannot be defined. Others, with more reason, have called it hard to be defined (q), a circumstance not unusual with other Subjects equally obvious, there being nothing more different both in accuracy and truth, than that Apprehension, which is adequate to the purposes of the Vulgar, and that, which ought to satisfy the investigation of a Philosopher.

In the first place, if we consider Mo-TION as an Object of Sensation, we shall

The other Modes of Contrariety are explained in the subsequent part of the Chapter here quoted, which in some Editions is the sourteenth.

⁽q) — χαλεπου λαβεῖν αὐτην (scil. κίνησιν) τί ἐειν 'Tis hard to comprehend what it is—So fays the Stagirite, and gives his Reasons, which we postpone for the present, that we may not anticipate. Phys. l. iii. c. 2. p. 45. Edit. Sylb.

C.XVI. discover it to be the Object not of one Sense, but of all. In a ring of Bells we hear it; in a succession of Savours we taste it; of Odours, we smell it; and that we feel or see it, there needs no example. Thus is it distinguished from those Objects, that are peculiar to one Sense alone; as from Colours, which we only see, or from Sounds, which we only hear. Simple therefore as it is, it is not only an Object of Sensation, but stands distinguished, as a COMMON OBJECT, from other objects that are PECULIAR.

AND are there then (it may be demanded) no other Objects of the fame Character?—'Tis answered, there are; as Bulk and Figure, common Objects to the Sight and Feeling; Rest and Number, common Objects, like Motion, to every Sense (r).

⁽r) Κοινὰ δὲ, κίνησις, ἢςεμία, ἀςιθμὸς, χῆμα, μέγεθω· τὰ γὰς τοιαῦτα ἐδεμιᾶς ἐςιν ἴδια (fcil. αἰσθήσεως). The common Objects of Senfation are Mo-

And how (it is asked again) is Motion distinguished from these?—We reply, from Rest, by Contrariety; from
Number, by Continuity; from Bulk and
Figure, as the Parts of Motion are never
permanent, never co-exist. What Speculations does this Idea, Simple as it is
called, open, even while we consider it
no farther than as an Object of Sensation?

But we must not stop here, even while we consider it as Physical. As such we shall find it connected with a Body, which moves; and as such, necessarily performed thro' Space, and in Time; so that these also, and their Attributes of Infinite and Continuous, must be added

TION, REST, NUMBER, FIGURE, BULK; for these are peculiar to no one Sense. Arist. de Animâ, l. ii. c. 6. p. 34. These common Objects are well worthy of Attention in explaining the Doctrine of the Senses and Sensation.

C.XVI. to it's Theory, as so many necessary Speculations.

WE cannot therefore but observe, that if it be a *simple* Idea, 'tis strangely complicated with a multitude of others (s);

⁽s) See the Beginning of the third Book of Ariflotle's Physics, ch. i. where being about to treat of Motion, he shews with what other Subjects it is neceffarily connected, fuch as Continuous, Infi-NITE, PLACE, TIME, &c. and where accordingly, after he has given us the Opinions of his Predecesfors in Philosophy concerning these Subjects, he proceeds in due order to explain what he thinks himfelf. -His words are, as they here follow. Δοκεῖ δ' ή κίνησις είναι των Συνεχών το δ' Απειρον έμφαίνεται εύθυς εν τῶ Συνεχεί. διὸ καὶ τοῖς οριζομένοις το Συνεχές, συμβαίνει σροσχρήσθαι σολλάκις τῷ λόγῳ τῷ τε 'Απείρε, ώς είς 'Απειρον διαιρετόν το Συνεχές ου. Προς δε τέτοις ανευ Τόπε, κ Κενέ, κ Χρόνε αδύναθου nivnow sivas. Motion appears to be in the number of things Continuous: now Infinite immediately shews itself in that which is Continuous; for which reason, when they define Continuous, they have often occasion to employ withal the character of Infinite, in as much as CONTINUITY is that, which is DIVISIBLE TO INFINITE. Add to this, without PLACE, and VACUUM, and TIME, 'tis impossible that MOTION should have existence. Physic. 1. iii. c. 1.

fuch as Space, Time, Infinitude, Contical CXVI.

nuity, together with Body, and it's vi
fible Attributes both of Quantity and of

Quality. But to proceed in our Speculation.

THAT there are things existing in act, in reality, in actuality (call it as you please) we have the evidence both of our Senses, and of our internal Consciousness; so that this is a matter of fact, which we take for granted. That there also are things which actually and really are not, is equally evident as the former, and requires no proving. A Sphinx for example actually is not; a Centaur actually is not; for these we may call Phantoms in the language of Lucretius,

Quæ neque sunt usquam, neque possunt esse profectò.

Lastly, every Substance that actually is, by actually being that thing, actually is

C.XVI. not any other (t). A piece of Brass for example actually is not an Oak; an Acorn, not a Vine; a Grape-stone, not a Statue.

I mean a difference in the last mode of actually not being; for the difference in omore a Statue, than it is an Oak, yet has it a Capacity to become the one, and none to become the other. The same may be said of the Acorn, with respect to the Oak; of the Grape-stone, with respect to the Vine. Were it not for this definite nature of Capacity, which as much distinguishes the invisible Powers,

⁽t) This LAST SPECIES of NON-ENTITY should be carefully attended to, as the Dostrine of Motion wholly depends upon it, and as it is so effentially distinguished both from the PHANTASTIC Non-entities (the Sphinx, the Centaur, &c.) immediately preceding, and from that strongest of all Non-entities, the Non-entity of IMPOSSIBILITY, such as that the Diameter of the Square should be commensurable with it's Sides, or that the same Number should be both Even and Odd. See before, p. 389.

as Actuality distinguishes the visible At-C.XVI.

tributes, there would be no reason why
an Acorn should not produce a Statue,
as well as it produces an Oak; or why
any thing (to speak more generally)
should not be able to produce any thing (u).

WHAT then, if there were no Capacity existing in the Universe?—Could there be Generations, Corruptions, Growths, Diminutions, Aliations, or Change of Place?—Impossible—But if these are all the Species of Physical Motion, it follows, that WITHOUT CAPACITY there can be no such Motions.

AND is MOTION then for this reason pure CAPACITY, and that only?—Let us examine.—A Man, being in Salisbury,

⁽u) This Distinction of το Έντελεχεία and το Δυνάμει, of that which is in ACTUALITY, and that which is in POWER, is the Basis of all the Peripatetic Reasoning upon this Subject. See p. 277, &c. also p. 148, 149.

C.XVI. has a Capacity of travelling to London; Is he therefore, for merely possessing such Capacity, upon the road thither?—He is not. - Motion therefore, tho' Capacity, is not Capacity alone: there must be some degree of ACTUALITY, or else Motion can never exist. Shall we then call it pure ACTUALITY?—We cannot affert that, when we have made Capacity one of it's requisites. Besides, how should Motion be seen in pure Actuality; an Actuality, which never exists, till Motion is at an end? A Man furely can no more be called moving towards London, who is actually arrived there, than he who, possessing the Capacity of going thither, forbears to exert any of his motive powers.

> IF Motion therefore be neither Capacity alone, nor Actuality alone, and yet both (as it appears) are effential to it; 'tis IN BOTH we must look after it,

AS DERIVING IT'S EXISTENCE FROM C.XVI.

Such in fact it will appear; fomething MORE than dead Capacity, something LESS than perfect Actuality: CA-PACITY ROUZED, and striving to quit it's latent Character: not the CAPABLE Brass, nor yet the ACTUAL Statue, but the CAPACITY IN ENERGY, that is to fay, the Brass in Fusion, while it is becoming the Statue, and is not yet become. Thus too, when a Complexion is actually Red, we fay not that it reddens; much less do we affert so, while it remains perfeetly Pale; but as every pale Complexion implies a Capacity to become red, 'tis in THE ENERGY OF THIS CAPACITY exists the Reddening, that is the Motion.

In the account of Motion here given we see the Doctrine of the Peripatetics.

The more ancient Sects of Pythagoreans and Platonics, tho' they give different Descrip-

all from the same Principles. Thus because, whenever any thing is moved, it is some way or other diversified either in Quantity, or in Quality, or at least in Place, for this reason they called Motion, Diversity. Again, because, while opposite forces are equal, then is Motion suspended, and revives not till Inequality destroys the Equilibrium; for this reason they called Motion, Inequative. Again, because every thing, which is moving, is not in some certain Attri-

ALL these Descriptions of Motion paturally flow from one Source, and that

butes, either what it was, or what it will be; for this reason they called Mo-TION, NON-ENTITY (x), not Non-entity absolute, but with a peculiar reference.

⁽x) — ἐλείου δὲ οἱ Πυθαγόρειοι τὰν κίνησιν εἶναι Ετερότητα, κὰ ᾿Ανισότητα, κὰ τὸ μὰ ὄν. Philop. in Physic. p. 144. For Non-Entity, see before p. 397, 98.

is, from it's indefinite (y) and unafcer- C.XVI.

tainable appearance. Now the reason
why it so appears, is, as we have said,
because we cannot place it either in the
simple CAPACITY of things, or in the
simple ACTUALITY. The Bow for example moves not, because it may be bent;
nor because it is bent; but the Motion
lies between; lies in an imperfect and obscure union of the two together; is THE
ACTUALITY (if I may so say) EVEN OF
CAPACITY ITSELF (z); imperfect and
obscure,

⁽y) — αίτιον δε τε είς ταῦτα τιθέναι αὐτες, ὅτι αόρις ὁν τι δοκεῖ εἶναι ἡ κίνησις. Phys. p. 45. Edit. Sylb.—The Cause of their placing MOTION among these things, is, that it appears to be something INDEFINITE.

⁽z) We have just before stiled it the Energy of Capacity; here, the Actuality of Capacity. These expressions are difficult, unless we attend to the manner, in which they are used. The original Greek expresses the Sentiment thus— ἡ τὰ δυνόμει ὅντος ἐντελέχεια, ἡ τοιῦτου, κίνησίς ἐςιν—The Energy of what exists in Power, considered as so existing, is Motion. Aist. Physic. 43. Edit. Sylb.—And soon after, p. 45—τὰ δὲ δοκεῖν ἀόριςον είναι την κίνη-

C.XVI. obscure, because such is CAPACITY to which it belongs.

> σιν αίτιου ότι έτε είς δύναμιν των δυτων, έτε είς ένέργειάν ές: Δείναι αὐτην ἀπλῶς Επε γάρ το δυνατον είναι σοσού κινείται έξ ανάγκης, έτε το ένεργεία σοσόν. ήτε κίνησις ενέργεια μέν τις είναι δοκεί, ατελής δέ° αίτιου δ' ότι ατελές το δυνατου & έςιν ένέρδεια κίνησις: κό δια τέτο δη χαλεπον αυτήν λαβείν τί έςίν· ή γαρ είς ς έρησιν αναγκαΐου θείναι, η είς δύναμιν, η είς ενερίειαν απλην τέτων δ' εθέν Φαίνείαι ένδεχόμενον λείπείαι τοένυν ο είρημεν 🕒 τρόπ 🚭, ενέργειαν μέν τινα είναι. τοιαύτην δ' ενέρχειαν, σίαν είπομεν, χαλεπήν μεν ίδειν. ενδεγομένην δ' είναι. Arift. Phys. 1. iii. c. 2. - The Reafon why Motion appears to be INDEFINITE, is, that there is no placing it simply either in the CAPACITY of things, or in their ENERGY: for neither is that necessarily moved, which is CAPABLE OF BECOMING a certain Quantity; nor that, which is a certain Quantity in Energy and ACT. Indeed the MOTION itself appears to be a certain Sort of Energy, but then 'iis an IMPERFECT one; and the reason of this is, the CAPACITY ITSELF is IM-PERFECT, OF WHICH it is the ENERGY. Hence therefore it becomes hard to comprehend it's Nature: for tis necessary to place it either in Privation, or in Capacity, or else in simple Energy, and yet no one of these appears to be possible. The Manner therefore, which we have mentioned, is the only one remaining, which is, that it should be a peculiar Sort of Energy, and that, such a one as we have described; HARD TO DISCERN, AND YET POS-SIBLE TO EXIST. P. 45, ut suprà. Edit. Sylb

AND fo much for Motion Physi-C.XVI. CAL, it's different Species, and it's general Character. We are now to inquire concerning Motion of another kind.

Ddg CHAP.

C H A P. XVII.

Concerning Motion Not-Physical—
This means Metaphysical, and why
fo called—Spontaneity—Want—Perception, Consciousness, Anticipation, Preconception—Appetite, Resentment, Reason—Motion Physical and Metaphysical
how united—Discord and Harmony of the
internal Principles—Powers vegetative,
animal, rational—Immortality—Rest,
it's several Species—Motion, to what
perceptive Beings it appertains; to what,
not—and whence the Difference.

Chap. XVII.

UR Contemplation hitherto may be called *Physical*, because 'tis about *Physical Motions*, that the whole has been employed, and 'tis from *Physical* Observations, that the whole has been deduced. But he, who stops here, has

but half finished his Work, if it be true that Corporeal Masses only move, because they are moved (a); and therefore cannot be considered as the original Source of Motion.



WHEN a Boy carries about with him an Infect in a Box, we call not this Motion the Infect's Motion as an Animal, because a Nut or a Pebble would have moved in like manner. (b) When the same Boy, piercing a Wing of this In-

⁽a) Τὸ κινῶν Φυσικῶς, κινητόν τοῦν γὰς τὸ τοιῦντον κινεῖ, κινέμενου κὰ αὐτό.—That which GIVES Motion PHYSICALLY, is itself moveable: for every thing, which gives Motion in this manner, is moved also itself.—And soon after—Τῶτο δὲ τοιεῖ Θίξει τος τὰμα κὰ πάχει—This, (namely the giving Motion) it does by Contact; so that at the same time (while it acts) it is acted upon. Aristot. Physic. 1. iii. c. 1. p. 44, 45. Edit. Sylb.

⁽b) — ἐοίκε δη το βίαιου εἶναι, ε εξωθευ η ἀρχη, μηθευ συμβαλλομένε τε βιασθέντω—That feems to be forced or competied, of which the Principle or Moving Cause is from Without, while the Being compelled contributes nothing from itself. Ethic. Nic. 1. iii. c. 1. p. 37. Edit. Sylb.

Chap. XVII. feet, makes it describe a circular Motion round a Pin or Needle, even this cannot well be called the Insect's Motion; for it's Motion, as an Animal, is not, like a Planet, round a Center. So far however the Motion differs from that in the Box, that by being a mixt Motion, the centrifugal Part is the Animal's own, the centripetal is extraneous. But if ever the Wing detach itself, and the fortunate Insect slie off; at that instant the Mixture of extraneous is no more, and the Motion thence forward becomes properly and purely animal.

AND what is it, which gives the Motion this proper and pure character?—It is Spontaneity (c), that pure and innate Impulse arising from the Animal it-

⁽c) To execute digerer an elvar, En dexn ev autoThat should seem to be Spontaneous, of which the
Principle or Moving Cause is in the Being itself.
Eth. Nic. l. iii. c. 1. p. 38. Edit. Syb.

felf, by which alone it's Flight is then produced and conducted.

Chap. XVII.

And thus, while we pass from Flying to Innate and Spontaneous Impulse, that is to fay in other words, from Flying to its Cause, we pass also insensibly from Motion Physical to Metaphysical; for ME-TAPHYSICS are properly conversant about primary and internal Causes. We call not fuch Impulse Metaphyfical, as if it were μετά την φυσικήν κίνησιν, something subsequent to natural Motion, that is, to Flying (for this would fet Effect before Cause, a preposterous order indeed!); but we call it Metaphysical, because tho' truly prior in itself, it is subsequent in Man's Contemplation, whose Road of Science is naturally upward, that is, from Effect to Cause, from Sensible to Intelligible (d).

⁽d) See Hermes, p. 9. See also the second Edition of Vol. I. p. 365, and of the present Treatise, p. 344, Note (d).

Chap. XVII. SPONTANEOUS Impulse (e) is to the Infect the Cause of Flying; so it is to the Dolphin, of Swimming; to the Man, of Walking. But what is the Cause of this Impulse itself? And why do Animals possess it, more than Stocks or Stones?

To folve this question, we must first remark, that every Animal, however exquisite in it's frame, is nevertheless far from being perfect, being still the Part of a greater and more perfect Whole (f),

to

⁽e) Όρμή. Diog. Laert. vii. 85. Una pars in Appetitu posita est. Cic. de Offic. i. 28.—Appetituoni—De Offic. ii. 5.—Animalia, quæ habent suos Impetus et rerum Appetitus—Ejusd. ii. 3.—Naturalem enim Appetitionem, quam vocant ορμήν, itemque, &c. De Fin. iv. 14.—Seneca uses the words, Spontaneos Motus. Epist. cxxi.

⁽f) Ipse autem Homo—nullo modo perfectus, sed est quædam PARTICULA PERFECTI. Gic. de Nat. Deor.

to which it is connected by many necesfary Wants. Chap. XVII.

ONE of these for example is common to all Animals, that of Food or Aliment. Suppose then this Want were not to be gratisted, what would be the confequence?—The Animal would perish.—And how has Providence obviated this danger?—It has given to every Animal, however base, however young, not only a Consciousness of this Want, but an obscure Sensation of some distinction in things without; and a Preconception or Anticipation in savour of that Aliment which it is to prefer, from an inward feeling of it's proper Constitution (g). 'Tis

ii. 14. See of this Vol. p. 230, &c. and the end of the prefent Chapter.

What is applied by Cicero in the above Passage to Man, may with equal propriety be applied to all other Animals, and needs no proving. 'I was a fundamental Doctrine of the Stoics.

⁽g) — Πρώτου οίκεῖον εἶναι ταυτὶ ζώφ την αὐτέ τύςασιν, ης την ταύτης συνείδησιν—The thing PRIMA-

XVII.

Chap. thus without either Teaching or Experience, but merely from an innate Feeling of what is conducive to their proper Being, that Infants are able to distinguish Milk from Vinegar; and Silkworms the Leaf of a Mulberry from that of a Laurel or an Ash (h). Now the

> RILY INTIMATE to every Animal, is it's OWN CON-STITUTION, and a Consciousness of it. Diog. Laert. vii. 85.

(h) - Simul atque natum sit animal-ipsum sibi conciliari, et commendari ad se conservandum et suum Statum, et ad ea, quæ conservantia sunt ejus Status, diligenda; alienari autem ab interitu, iifque rebus, quæ interitum videantur adferre. Cic. de Fin. iii. 5.

Thus Seneca-OMNIBUS (sc. Animalibus) Con-STITUTIONIS SUÆ SENSUS EST, et inde Membrorum tam expedita tractatio. Epist. cxxi. - Soon after-Constitutionem suam [Animal] crasse intelligit, summatim, et obscure-and again-ante omnia est Mei cura \$ hoc animalibus inest cunctis; nec inseritur, sed INNAS CITUR. - And foon after, speaking of the ferror, which some Animals feel in their earliest state, when they first behold a Hawk, or a Cat, he adds - apparet illis inesse Scientiam nocituri, non EXPERIMENTO COL-LECTAM; nam, antequam possint experiri, cavent.

the Consequence of this Consciousness, of Chap. these Preconceptions or Anticipations, is a

Even the ferocious tribes of Animals, when their Powers become mature, are shewn, how to employ them, by an innate, internal Instinct.

Dente lupus, cornu taurus petit, unde, nisi INTUS Monstratum-

As to INNATE IDEAS, there is certainly nothing fo true, (and it requires no great Logic to prove) that, if by INNATE IDEAS be meant INNATE PRO-POSITIONS, there never were, nor ever can be any fuch things existing. But this no ways tends to subvert that innate Distinction of things into Eligible and Ineligible, according as they are fuitable to every Nature, or not fuitable; a Distinction, which every Being appears to recognize from it's very birth.

Hence the Author above quoted in the same Epistle -tenera quoque animalia, a materno utero, vel quoquo modo effusa, quid sit infestum ipsis PROTINUS norunt, et mortifera devitant.

And 'tis upon this reasoning we may venture to affirm, that every fuch Being in it's earliest moments perceives itself to be an Animal, tho' it may not be philosophically informed, what an Animal really is-QUID SIT ANIMAL, nescit; ANIMAL ESSE se sentit. Ibid.

Chap. Spontaneous Impulse: for 'tis in these that fuch Impulse finds an adequate efficient Cause.

> Whatever others in ancient, or even in modern days, may have thought concerning this Subject, that Philosopher surely can be hardly suspected of favouring Innate Ideas, who held THE HUMAN SOUL, or rather it's INTELLECTIVE PART, from it's comprehending all things, to be for that very reason something pure and unmixed-έπει σάντα νοεί, αμιγή είναιand this, because [in any compound] that which is alien, by shewing itself along with other Objects, impedes and obstructs-wageμφαινόμενου γάρ κωλύει το αλλότριου, η αντιφράτει-That therefore the HUMAN INTELLECT in it's Nature was nothing else than mere CAPACITY, or THE BEING CAPABLE - Wise wid αύτε είναι Φύσιν τίνα μηθεμίαν, άλλ ή ταύτην, ότι Suvarov-That in consequence it WAS NOT any single one of the whole tribe of Beings, before it comprehended and understood it—o άρα καλέμεν της ψυχης Νές άδευ ες τυ ευεργεία των ουτων, τρίν νοείν-That 'twas not therefore probable it should be blended with the Body, for that then it would become vested with sme corporeal Quality, and be either hot or cold, and have some corporeal Organ, as the fensitive faculty has; whereas now it has none - διο έδε μεμίχθαι εύλοδον αὐτον τῷ σώματι σοῖος γάρ άν τις γίγνοιτο, θερμός η ψυχρός, κάν έργανόν τι είη, ώσπερ τω αισθητικώ νου δε εδέν έςι-He concludes at last his Reasonings with telling us-that the Intellect,

Cause. But if we include all these under the common name of Perception,

Chap. XVII.

we

Intellect, as he had said before, was in Capacity, after a certain manner, the several Objects intelligible; but was in actuality no one of them, until it first comprehended it—and that it was the same with the Mind or Human Understanding [in it's original State] as with a Rasa Tabula or Writing Tablet, in which nothing as yet had been actually written—διο είρηται ωρότερου, ότι δυυάμει ωως έςὶ τὰ υοπτὰ ὁ Νως, ἀλλ' ἐντελεχεία εδεν, ωρὶν ἀν μη νοῆ· δεῖ δ' ἔτως, ὧσπερ ἐν γραμματείω, ὧ μηδὲν ὑπάρχει ἐντελεχεία γεγραμμένου, ὅπερ συμβαίνει ἐπὶ τὰ Νῶ. Ατιβίοι. de Animâ, l. iii. iv.

As to the Simile of a RASA TABULA, or (to fpeak in a language more modern and familiar) that of A SHEET OF FAIR WRITING PAPER, tho' it be fufficiently evident of itself, it may be illustrated in the following manner.

The Human Intellect is pure unmixed, untainted CA-PACITY, as a Sheet of fair Writing Paper is pure unmixed, untainted WHITENESS. The pure unmixed Character of this intellectual Capacity renders it fit for every Object of Comprehension, as the pure unmixed Character of the Paper makes it adequate to every Species of Writing. The Paper would not be adequate to this purpose, were it previously scrawled over with Syllables or Letters. As far only as it is clear, it is capable; Chap. XVII.

we shall then find, that Perception is the proper Cause of Spontaneous Im-

PULSE;

capable; and if we suppose it perfettly clear, then is it perfettly capable. The same Sort of Reasoning is applicable to the HUMAN UNDERSTANDING.

Such we take to be the Sentiments of this ancient Sage on this important Subject.

The Sentiments and Subject, being both of them curious, will ('tis hoped) be an Apology for this Digreffion.

By it we think it appears, that it was a received Opinion among the Ancients, that Instincts both in Man and Beast were original, and founded in Nature. That Aristotle held the same, appears not only from his History of Animals, but from the following remarkable Passage in his Politics, relative to Man. There speaking of the Sacial State, or State of Society, he says—Φύσει μὲν ᾶν ἡ ορμη ἐν τῶστιν ἐπὶ την τοιαύτην κοινωνίαν—that the Tendency to such a Society was by Nature in all men. Pol. p. 4. Edit. Sylb.

We think also it farther appears, that whatever Aristotle thought of Instincts residing in the lower faculties of Man, Instincts respecting the purposes of common Life and Society, yet, as to the Supreme and Intellective Part, this he held in it's original State to be wholly pure and unmixed, and only sitted, by that Purity, for general and universal Comprehension.

PULSE; that 'tis so the Animal impels itfelf, because 'tis so that it perceives; it does not so perceive, because it is so impelled (i).

Chap. XVII.

THE Impulse hitherto spoken of is of earliest date, commencing in a manner with the Animal itself; and, as it merely respects the Body and bodily Pleasure, is distinguished from other Impulses by the name of APPETITE (k).

As Animals advance, the Scene of Perception enlarges, and the number of Spontaneous Impulses increase of course with it. Yet while Pleasure corporeal continues the sole Object, and there appears no Danger either in acquiring or pre-

prehension. He seems (like the rest) to have justly distinguished between INNATE INSTINCTS, and INNATE PROPOSITIONS.

⁽i) — οςεγόμεθα ότι δοκεί, μαλλου η δοκεί, διότι ερεγόμεθα. Arift. Metaph. Λ. ζ. p. 203. Edit. Sylb.

⁽k) ЕПІӨТМІА.

XVII.

Chap. ferving it, the Impulse is still an Appetite, varying only in it's name, as the Pleasure, to which it is referred, varies in the Species.

> YET, besides these Preconceptions, the Sources of fimple Appetite, there are also Preconceptions of offering Violence, and others of refisting Danger, and these naturally call forth another Power, I mean the Power of Anger (1). Few Animals, when young, feel any fuch Preconceptions; but the more ferocious and favage are fure to find them at maturity; and the irafcible Impulses soon spontaneously attend, prompting the Lion to employ his Fangs; the Vultur his Talons; the Boar his Tusk; and every other Animal of prey his proper and natural Preparations.

All these Spontaneous Impulses, as well of Anger as of Appetite, are equally in-

⁽¹⁾ $\Theta \Upsilon MO \Sigma$.

cluded under the common name of Irra- Chap. tional (m), being called by this name, because they have nothing to do with Reason.

XVII.

BUT when REASON becomes strong enough to view it's proper Objects; that Sight, to which no Being here but Man alone is equal; when the Moral and the Intelligible rise before his mental Eye, and he beholds the fair Forms of Good and of Truth; then too arise Impulses of a far more noble kind, those to Friendship, to Society, to Virtue, and to Science (n).

AND

⁽m) AΛΟΓΟΣ, as well as ΛΟΓΙΚΟΣ and ΛΟ-ΓΟΣ, are Terms too well known, to need more than to be mentioned.

⁽n) This Progression from the lower to the superior Faculties is well described by Cicero.

Prima est enim conciliatio hominis ad ea, quæ sunt secundum naturam: simul autem cepit intelligentiam, vel notionem potius (quam adpellant Evvoixv illi) viditque res rum agendarum ordinem, et, ut ita dicam, concordiam; E & 2 multo

Chap.

And thus is Man not only a Microcosm in the Structure of his Body, but

in

multo eam pluris æstimavit, quam omnia illa, quæ primum dilexerat: atque ita cogitatione et ratione conlegit, ut statueret in eo conlocatum summum illud hominis PER SE LAUDANDUM ET EXPETENDUM BONUM. Cic. de Fin. iii. 6.

Unicuique ætati sua constitutio est: alia infanti, alia puero, alia seni: omnes enim constitutioni conciliantur, in quâ sunt. Infans sine dentibus est: huic constitutioni sua conciliatur. Enati sunt dentes : huic, &c. Sen. Epift. exxi. The whole Epissle is worth perusal, in particular what follows-Ergo infans ei constitutioni suæ conciliatur, quæ TUNC infanti est, non quæ futura juveni est. Neque enim, SI ALIQUID ILLI MAJUS IN QUO TRANSEAT, restat; non HOC quoque, in quo noscitur, SECUNDUM NATURAM EST.

See also his elegant Application of this Doctrine to the different Stages of that well-known Vegetable, Corn, from it's first appearance above the ground, to it's State of maturity. Nam et illa herba, quæ in Segetem, &c. Epift. p. 603. Edit. Varior.

See also how elegantly Cicero applies the same Doctrine to the Vine, where to the vegetative Powers he first supposes Sense superadded; and then to Sense, Region; each Superaddition still increasing in value, the' not robbing the former Powers of their due regard and attention-Et nunc quidem, quod eam tuetur, in the System too of his Impulses, including all of them within him from the basest

Chap. XVII.

ut de Viți potissimum loquar, est id, &c. De Fin. v. 14.

See Vol. the First, Dialogue concerning Happiness, part the second, and the Notes, p. 302, &c.

The Number and Subordination of the animating Powers are well diffinguished in the following Extracts.

Των δε δυνάμεων της ψυχης αι λεχθείσαι τοις μέν ένυπάρχεσι φασαι (καθάπερ είπομεν) τοῖς δὲ τινὲς αὐτων, ένίοις δε μία μόνη δυνάμεις δε είπομεν Βρεπ]ικου, αίσθητικου, όρεκτικου, κιυητικου κατά τόπου, διανοητικόν ύπάρχει δε τοις μεν Φυτοις το Βρεπικου μόνου, ετέροις δε το αυτό τε κό το αισθητικόν εί δε το αίσθητικου, η το ορεκτικου όρεξις μεν γαρ επιθυμία, κ) θυμός κ) βέλησις. τα δε ζωα σάντα μίαν έχει των αισθήσεων, την άρην ω δε αίσθησις υπάρχει, τέτω ήδονή τε κ λύπη, κ ή έπιθυμία, τε γαρ ήδεω όρεξις isiv anth-With regard to the Powers of the Soul that have been enumerated, to some Beings they appertain ALL of them; to others, only SOME of them; and to others, only ONE of them. The Powers we have mentioned, are the Nutritive, the Sensitive, the Power of Desire, of local Motion, of Ratiocination. Now to Plants there appertains only the Nutritive Power; to other Beings both this, and the Sensitive : but if the Sensitive, then the Power of Desire; for Appetite, and Resentment, and Ee 3 Volition

Chap. XVII.

basest to the most sublime (o). He includes them all, as being possessed of all

Per-

Volition (the three great leading Powers) are each of them a Species of Desire, and all Animals have at least one of the Senses, I mean the Sense of Touch. Now to the Being, which possesses Sensation, to this appertain also Pleasure and Pain, and that which is Pleasurable and Painful. But if these, then Appetite; for Appetite is the Desire of that, which is Pleasurable. Arist. de Anim. 1. ii. c. 3.

And foon after- Aveu per yap to Spenling to airθητικου έκ έςι τε δε αίσθητικέ χωρίζεται το θρεπλικου έν τοις Φυτοίς. Πάλιν δε, άνευ μεν τε άπλικε των άλλων αισθήσεων εδεμία υπάρχει, άφη δε άνευ των άλλων υπάρχει τολλά γάρ των ζώων έτε όψιν έτε ακοην έχεσιν, έτε όσμης όλως αίσθησιν η των αίσθητικών τα μέν έχει το κατα τόπου κιυητικού, τα δ' έκ έχει τελευταίον δε κη το ελάχισον, λογισμον κη διάνοιαν οίς μεν γαρ υπάρχει λογισμός των Φθαρτών, τέτρις κ τα λοιπα σάντα· οίς δε έκεινων έκας ου, & σασι λογισμός, - άλλα τοῖς μὲν ἐδὲ Φαντασία, τα δὲ ταύτη μόνον ζωσι-Without the Nutritive Power there is no Sensitive; but then the Nutritive is separated from the Sensi-Again, without Touch there can be none tive in Plants. of the other Sensations, but there may be Touch without any of the rest; for thus are there many Animals, which have neither Sight, nor Hearing, nor even a Sensation of Smells. Farther Still, of the Sensitive Beings some possess the Loco-motive Power, and others possels it not: the last Order

Perception; and Perception we have now found to be the Cause of all Spontaneous Impulse.

Chap. XVII.

WE

Order of Beings, and those the fewest in number, are those, which possess the Powers of REASONING and Dis-CUSSION: and among the mortal and perishable Beings those, who possess these Powers, possess ALL the remaining Species; but those, who possels any one of these Powers in particular, do not all of them therefore possess the Reasoning Power, but some of them want even the Power of Phanfy or Imagination; others of them conduct themselves and live by that [inferior Power] alone. Arist. de Anim. 1. ii. c. 3. p. 28. Edit. Sylb. See before, p. 106, Note (g).

It must be here observed, that PLANTS are said To LIVE $(\zeta_{n\nu}^{\alpha})$ tho' not to be Animals $(\zeta_{\omega\alpha}^{\alpha})$; the Character of ANIMAL being derived from the Power of SENSATION, of which Plants are supposed destitute; while that of LIFE appertains to them, because they GROW, and PRODUCE each of them SEED after their kind.

These different Powers, as they stand united in one fubject, may be better comprehended, by marking their clear and distinct character, when they exist apart, in different Subjects.

(0) The preceding Speculations have respect to the threefold Division of the Soul, adopted by the Pythagoreans and Platonics, by which they made it to be Rational, Irascible, and Concupiscible, and called it's E e 4

Chap. XVII.

WE must remember however that 'tis not Perception simply, which causes such Impulse; but 'tis Perception of Want within, and of adequate Good without; and that as this Good is sometimes an object of Sense, sometimes of Intellect, sometimes a mistaken Good, at other times a real one, (in as much as Sensation is fallible, and Reason may be deceived) so the whole amounts to this; the Cause of Spontaneous Impulse is the Perception of absent Good, and that either sensible or intelligible, either real or apparent (p).

AFTER this manner we perceive one of the most important Unions; the Union

three Faculties Λόιω, Θυμός, and Ἐπιθυμία, Reason, Anger, and Concupiscence or Appetite. See Diog. Laert. iii. 90. Plato's Republic is founded on this Division.

⁽p) See Vol. the First, Treatise on Happiness, and Notes on the same, pages 212, 246, 334, 356.

Chap. XVII.

of those two capital Motions, the Physical and the Metaphysical. The Soul perceives those Goods, which it is conscious that the Animal wants. Hence an Impulse to obtain them by employing the Organs of the Body; and this, as far as the Soul only is concerned, we call Motion Metaphysical. Hence the bodily Organs actually are employed, and this we call Motion Physical. Perception leads the way; Spontaneous Impulse follows; and the Body supplies the place of an Instrument or Tool (q).

As

⁽q) — ἔτως μὲν ἔν ἐπὶ τὸ κινεῖσθαι κὰ πράτ ειν τὰ ζῶα ὁςμῶσι, τῆς μὲν ἐχάτης αἰτίας τε κινεῖσθαι ὁςἑξεως ἔσης, ταύτης δὲ γινομένης ἢ δι αἰσθήσεως, ἢ διὰ Φαντασίας κὰ νοήσεως—And thus it is, that ANIMALS proceed to move themselves and aɛt, a Desire being the last and immediate Cause of their moving, and this Desire being occasioned either by Sensation, or else by IMAGINATION and INTELLECTION. Arist. de Animal. Motu. c. vii. p. 155. Edit. Sylb.

Τὰ μὲυ γὰς ὀςγανικὰ μέςη ωαςασκευάζει ἐπιτηδείως τὰ ωάθη, ἡ δὲ ὄςεξις τὰ ωάθη, την δὲ ὄςεξιν ἡ Φαντασία:

PHILOSOPHICAL

Chap.

426

As every animal Motion has a view to Good, so, if it miss that Good, the Motion ceases, and the Animal is left discontented: if it obtain it, the Animal is happy, but then too the Motion ceases; for the End is obtained, to which the Motion tended. And thus is all animal Motion in it's Nature finite, as it has a Beginning and an End; as it begins from the Want of Good, and ends in it's Acquisition. Hence too as it ends where it begins, it bears an analogy to Motion circular, where we run a complete round,

Φαντασία αὐτη δὲ γίγνε αι η δια νοήσεως, η δι αἰσθήσεως.—The CORPOREAL FEELINGS prepare in a proper manner the ORGANIC PARTS of the Body; Desire prepares those Feelings; that Desire is prepared by some FANCY or APPEARANCE; and this lost arises either thro' Intellection or Sensation. Ejust. 1. c. 8. p. 157. Edit. Sylb.

If it be asked why nothing has been said concerning Aversion and Evil, as well as concerning Volition and Good; the Answer is, that to sty Evil is to seek Good; and to escape Evil is to obtain Good; so that in the present inquiry they are both included.

by returning to the point whence we began.

Chap. XVII.

'Tis no-unentertaining Speculation to attend to these internal Motions, as they arise from the different prevalence of their different internal Causes. Within the Soul of Man there are Passions, and a Principle of Reason: sometimes the internal Motion arises from many Passions at once, and the Soul is like a Sea when agitated by contrary Winds.

Imo in corde PUDOR, mixtoque INSANIA LUCTU (r).

Here the Motion is tempestuous, and Reason during the Storm appears to be overwhelmed. At other times she interposes, but without success; and in such case the Motion is equally turbid and ir-

⁽r) Æn. x. 870.

Chap. XVII.

regular. Thus Medea, when she is about to murder her children:

Καὶ μανθάνω μέν, οἶα δρᾶν μέλλω κακά: Θυμὸς δὲ κρείτ]ων τῶν ἐμῶν βελευμάτων (s).

I know the mischiefs, that I soon shall act, But Passion over-rules my better thoughts.

There are times too, when Reason acts with greater success, and when the Motion becomes of course more placid and serene. But whenever she is so far able to establish her authority, as to have the Passions obey her uniformly without murmuring or opposition, then follows that orderly, that fair and equal Motion, by which the Stoics represented even HAP-PINESS itself, and elegantly called it the Well flowing of life (t).

⁽s) Arrian. Epiet. 1. i. c. 28. p. 144. Edit. Upton. Euripid. Med. v. 1078, 9.

⁽t) "Ευροια βίκ'—See Diog. Laert. vii. 88.—Hinc intellecta est illa beata vita, secundo destuens cursu. Senec. Epist. 120. See also of this Treatise, p. 261, 262.

Besides the well-flowing here men- Chap. tioned, which is of a kind purely moral, there is another highly valuable, which is of a kind purely intellectual. It is under this Motion, that the Man of Speculation passes, thro' the road of Syllogism, from the simplest Truths to the most complicated Theorems.

XVII.

AND here it may be remarked, that as pure and original Truth is the Object of our most excellent Volition (it being all that we feek, confidered as Beings intelligent), so is it as strictly and properly the Object of our most excellent Perception; there being no perceptive Power, but our Intellect alone, that can reach it. 'Tis here then we behold the meaning of an antient and important Doctrine, that THE PRIMARY OBJECTS OF PERCEPTION AND OF VOLITION ARE THE SAME (u).

⁽u) To OPEKTON no To NOHTON MIVER, & MIθέμενου τέτων δε ΤΑ ΙΙΡΩΤΑ, ΤΑ ΑΥΤΑ-The DESIRABLE

Chap.

'Tis hence also we may learn, that not only ALL GOOD IS TRUTH (as there can be none such without a reason, from which it is so denominated), but also that ALL TRUTH IS GOOD, as it is the sole pursuit of the contemplative, the natural Object of their Wants, equally as honours are to the ambitious, or as banquets to the luxurious (x).

HAVING

Desirable and the Intelligible move, without being moved; and of these two Genera those Objects, that are Highest and First, are the Same. Arist. Metaph. A. ζ. p. 202. Edit. Sylb.

When a Theorem of Archimedes moves within us a Desire to understand it; or when, being understood, it raises within us our necessary Assent: we do not conceive the Theorem itself to be moved, either by the Desire, or by the Assent, as the Horses are moved, that give Motion to the Waggon, or the Waggon moved, that gives motion to it's Load.

(x) Tho' we feldom hear of Goods in our common intercourse with Mankind, but what have reference to the Body, or at best to the lower Affections; yet HAS THE HIGHEST FACULTY OF THE SOUL A PECULIAR GOOD, as much as the other faculties have,

HAVING faid thus much concerning Chap. Perception, and that highest Species of animal Impulse, I mean Volition, it must not be forgot, that there are other internal Motions of a very different character, where both Perception and Spontaneous Impulse are in a manner unconcerned.

XVII.

WITHIN every Animal there is an IN-NATE and ACTIVE POWER, which ceases not it's work, when Sense and Appetite are asleep; which, without any conscious co-operation of the Animal itself, carries it from an Embryo or Seed to the maturity of it's proper Form. Now so far this Power may be called a Principle of Motion. At Maturity it stops (for were

from the intellectual Possession of which Good it seeks FELICITY and PEACE.

I loved her (fays the wife Man, speaking of Wifdom; and what is Wisdom, but the most exalted Truth?) I loved her above Health and Beauty, and chofe to have her instead of Light: for the Light, that cometh from her, never goeth out. Wifd. vii. 10.

Chap. XVII. the progress infinite, there could be no Maturity at all); and so far it may be called a *Principle of Cessation* or *Rest* (y). From this point of Rest it deserts the Being gradually, and in consequence of such desertion the Being gradually decays.

'Tis by this Principle that the Magnitude of the Thistle, the Oak, the Bee, the Elephant, and every other natural Production, whether animal or vegetable, is to a certain degree circumscribed and limited; and when that Limit either fails or exceeds in a conspicuous manner, the Being becomes a Monster. See Vol. I. p. 295, Note xviii.

⁽y) Speaking of the difference between the Operation of the Elements and mere MATTER, and that of NATURE, and an internal Principle, the Stagirite obferves-Των δε Φύσει συνεςώτων σέρας ές η λόγω μεγέθες η αυξήσεως ταυτα δε ψυχής, άλλ' έ συρος, κ λόγε μαλλον η ύλης - As to things, which derive their Constitution from NATURE, there is a BOUND and Proportion in their Magnitude and Growth; and thefe proceed from their Soul, not from the Element of Fire; and are caused rather by Reason, than by Matter. De An. ii. 4. p. 30. Edit. Sylb. - And, not long before, describing a Physical or natural Substance, he makes it to be fomething έχουτ 🕒 άξχην κινήσεως κή ςάσεως εν αὐτῶ, which possesses within itself a Principle of Mo-TION and of REST. De An. ii. 1. p. 23. Edit. Sylb.

Et labor, et duræ rapit inclementia mortis (z).

Chap. XVII.

As the Local Motion of Animals is derived from Sense, and spontaneous Impulse; so from the Principle, just described, are derived their other Motions: from it's Activity, their Generation, their Augment tion, and Change to better; from it's Cessation, their Change to worse, their Diminution, and lastly Death*. 'Tis this is that internal Principle, which descends from Animals even to Vegetables; and which, as these last possess no other, is commonly called Vegetables to the more obvious Name of Nature (a).

⁽z) Georg. iii. 67, 68.

^{*} See before, p. 384 to p. 389.

⁽a) See the Definition of NATURE in Volume the First, among the Notes on the first Treatise, p. 257, and more fully in the addition to Note 3, p. 282.

Chap. XVII.

WE must remember however, that while we speak of Motion here, we mean the invisible Cause, not the visible Effects; for these are purely physical, and belong to another Speculation. After the same manner are we to speak of those other

The VEGETATIVE LIFE here mentioned is sometimes called ψυχη φυτική, sometimes Seemlinh, and at other times to Seenlinov, the NUTRITIVE PRIN-CIPLE; that Principle, which, passing thro' Plants, as well as Animals, never ceases to nourish and support them, thro' the period of their existence-asi yao ένεργει ή Φυτική ψυχή-κ μαλλον έν τοις ύπνοις, ένθα αί λοιπαί της ψυχης δυνάμεις ήρεμέσι τότε γευ μάλιςα αί wétels-THE VEGETATIVE SOUL energizes at all times, and more during Sleep, when the OTHER Powers ARE AT REST; and therefore 'tis then mostly are performed the Digestions. Philop. in Arist. de An. 1. ii.—Το έρδου το αύτε ωοιεί το θρεπδικου μόριου έν τῷ καθεύδειν μάλλον ἢ ἐν τῷ ἐΓρηΓορέναι. τρέΦεται γάρ τη αυξάνεται τότε μάλλον ώς έδεν προσδεόμενα προς ταυτα της αἰσθήσεως. - The NUTRITIVE part of the Soul performs it's Work in SLEEPING, more than in IV aking; for then, more than at any other time, are Animals nourished and enlarged in bulk, as they have NO NEED OF SENSATION FOR THESE PURPOSES. Aristot. de Somno, cap. 1. sub sin. See before, p. 104.

motive Powers, the Powers of Magne- Chap. tism and Electricity; the visible Motions, which they produce, being of a Species merely Physical, but the Cause of these Motions lying itself totally concealed. Whether then we suppose it a Species of inferior Life, and fay with Thales, that the Magnet and the Amber are animated (b); or whether we content ourfelves with calling it an internal active Quality (occult we must not call it, for

XVII.

that is now forbidden) we may fafely pronounce it a Quality, which, tho' we

⁽b) This Opinion of Thales concerning the Magnet's having a Soul, because it moved Iron (ψυχην έχει, ότι του σίδηρου κινεί) may be found in Arist. de An. I. i. c. 2. p. 7.

Philoponus, in his Comment on this Passage, gives us from Thales the following Sentiment, which, tho' not immediately to our purpose, we have transcribed for it's importance- έλείεν, ώς ή Πρόνοια μέχρι των έργατων διήκει, κ, εδέν αυτήν λανθάνει, εδέ το έλαχισον -He used to say that PROVIDENCE extends to the lowest of all Beings, and that nothing is hid from it, no not even that which is most minute. See before, p. 130.

Chap. XVII.

are sure of it's existence, is not otherwise comprehensible, than by reference to it's Effects; as we know Homer, who is out of Sight, by his Iliad, which lies before us.

THERE is yet another motive Principle, far greater in local extent than all yet mentioned; I mean that, by which not only every Atom of this our Earth has it's proper tendency, but by which even Planets, Satellites, and Comets, describe their Orbits.

ASTRONOMERS will inform us as to the force of Motion here, and how much on it's due Order depends this immense Universe.

THE best of ancient Philosophers, when they saw so many inferior Motions not to be performed without Counsel or Design, could not think of imputing such superior ones to the essicacy of blind Chance;

Chance; and therefore, whatever they Chap. might conceive of the immediate Cause (call it Gravitation or Attraction, or by any other name) they justly supposed the primary Cause to be A PRINCIPLE OF IN-TELLECTION :

XVII.

totam infusa per artus Mens agitat molem—— (c).

THEY indeed fo far confidered MIND to be the Source of ALL MOTION, that 'twas thro' its Motive Powers, that they distinguished it from Body; which last was no more than a passive Subject, possessing nothing motive within itself, but deriving all it's Motions from something else.

'Twas hence too that they inferred THE IMMORTALITY OF THE SOUL. They reasoned thus.—" Vital Motion may

⁽c) En. vi. 727.

Chap. XVII.

" for sake the Body, because to the Body 'tis

" not an Essential; and in such case the

" Body is said to die. But Vital Motion

" cannot for sake the Soul, because to the

" Soul'tis an Essential, and 'tis not pos-

" sible that any thing should be for saken by

" itself (d)." But this by way of digression.

The whole Passage, which is rather too long to transcribe, is the Translation of an Argument, taken from Plato's Phædrus.—Το δε ἄλλο κινών, κ) ὑπ' ἄλλω κινών, κ. τ. λ. Plat. Edit. Ficini. p. 1221. B.

See Macrobius in Somn. Scipionis, c. 13.

Cicero has used the same Argument in his Tract de Senectute.—Cumque SEMPER AGITETUR ANIMUS, nec principium motus habiat, quia SE IPSE MOVEAT, NE FINEM QUIDEM habiturum esse MOTUS, quia NUNQUAM SE IPSE SIT RELICTURUS—C. 21.

Quintilian has brought the Argument into the Form of a Syllogism.—Quicquid ex seipso movetur, immortale est: Anima autem ex seipsâ movetur: immortalis igitur est Anima. Inst. Orat. V. 14.

⁽d) — Quod autem motum adfert alicui, quodque IP-SUM agitatur ALICUNDE, quando finem habet motûs, VIVENDI FINEM HABEAT necesse est. Solum igitur, QUOD SEIPSUM MOVET, quia NUNQUAM DESERITUR A SE, NUNQUAM ne moveri quidem desinit. Quinetiam, &c. Cic. Tuscul. Disp. i. 23.

As to the rife and duration of Mo-Chap. TION, the founder of the Peripatetic XVII.

Sect thus states the Question. "Was" Motion (says he) ever generated with—

"out existing before; and is it ever again

"so destroyed, that there is nothing moved;

"or was it neither generated, nor is de—

"stroyed, but ever was, and will be;

"something appertaining to Beings, which

"is immortal and unceasing; a kind of

"Life, as it were, to all things that exist

"by the power of Nature (e)"?

Those, who meditate an answer to these Queries, will remember that Motion is co-eval with the Universe, since we learn that, in its first and earliest æra, the Spirit of God Moved upon the face of the waters*. They will remember too that Motion is as old as Time, and their

⁽e) Πότερον δε γέγονε ωστε κίνησις, εκ έσα ωρότερου, κ) Φθείρεται ωάλιν έτως, ώς ε κινεϊσθαι μηδέν η
έτε εγένετο, έτε Φθείρεται, άλλ' αεὶ ην, κ) έςαι, κ)
τετ' αθάνατον κ) άπαυς ον ὑπάρχει τοῖς έσιν, οἶον ζωή
τις έσα τοῖς ψύσει συνες ώσι ωᾶσιν; Ατίβι. Phys. 1. viii.
c. 1. p. 144. Edit. Sylb.

^{*} Genefis chap. 1.

Chap. XVII. Coexistence so necessary, it is not possible to suppose the one, without supposing the other.

AND thus, having before confidered PHYSICAL MOTION, have we now confidered what may be called METAPHYSI-CAL, or (if I may use the expression) CAUSATIVE MOTION; including under this name every Animating Power, whether rational or irrational, which, though different from Body, acts upon Body, causing it to live, to grow, and move itself and other Bodies. These animating Powers are only known from their Effects, as the Painter's Art is known from his Pictures. And hence, as 'tis the Effect, which leads us to recognise the Cause, hence these animating Powers, tho' prior in existence to Physical Effects, are necessarily subsequent in human Contemplation, and are thence, and thence only called METAPHYSICAL (f).

⁽f) See 409, 451, 483. As to the character and subordination of the several Animating Powers, see before p. 421, 422, and so on to p. 438, as well in the Text, as in the Notes. See also Chapter the Sixth.

And now, having done with Morion, Chap. we must take some notice of REST.

THE most obvious Species of REST is that opposed to the most obvious Species of Motion; such for example as the Cessation of Gales, after they have been fresh and blowing:

> Ingrato celeres obruit OTIO Ventos- (g).

-the Cessation of Billows, after they have been loud and tempestuous-

SILENCE, ye troubled Waves, and thou Deep, PEACE (h).

Bur

⁽g) Horat. Od. 1, i. 16.

⁽b) Par. Loft, vii. 216.

Both these Species of Rest are denoted in English by the common name of CALM. The Greeks, with their usual precision, have given a different Name to each: the first, that is the Wind-Calm, they call Nηνεμία, and define it 'Ηρεμία εν πλήθει αέρω,

Chap. XVII. But 'tis expedient to be more particular.—The two instances of Rest, that we have alleged, are of Motion purely Local. So is it, when the flight of an Arrow is spent; when a Bowl, that has been running, stops. But Rest is also connected with the other Species of Motion. The Cestation of Growth is Maturity; of the Vital Energies, is Death.

So too with respect to the higher saculties of the Soul, Sense and Reason.

TRANQUILLITY in a quantity of AIR; the fecond, that is the Sea-Calm, they call Γαλήνη, and define it Όμαλότης θαλάτης, EVENESS in the SEA'S SURFACE. These definitions are of Archytas, and may be found in Aristotle's Metaph. p. 136. Edit. Sylb.

PLATO has brought the two terms together, in those harmonious Lines, delivered by Agatho in the Banquet—

Εἰρήνην μεν εν ανθρώποις, ωελάγει δε ΓΑΛΗΝΗΝ, ΝΗΝΕΜΙΑΝ ανέμων, κοίτην υπνου τ' ενὶ κήδει.

See Platen. Symp. p. 1190, Edit. Fic. See also the learned and ingenious Translation of Mr. Sydenham, p. 118.

The Rest of the sensitive Powers, after the labours of the day, is SLEEP:

Chap. XVII.

Dulcis et alta Quies, placidæque simillima Morti (i).

The Rest of the Passions, after having been agitated, is Composure and Equanimity; the Rest of the deliberative and reasoning Powers, after sedulous Investigation, is the Discovery of the thing sought, or rather the Acquiescence in Truth discovered, either real or apparent, either practical or speculative.

And hence, in the last mode of Rest, or Acquiescence, the rise of our English Phrase, I am sixt; and of the Latin Phrase, Stat:

Stat conferre manum—— (k).

⁽i) Æn. vi. 522.—See before, Hermes, p. 52, and of this Volume, p. 336, 337.

⁽k) Æn. xii. 678.

The incomparable Sanctius in his Minerva gives the following excellent explanation of this Passage. Quam-

Chap. XVII.

Hence Science in Greek is called EIII- Σ THMH, every Theorem being as it were a Resting Place, at which the man of Science stops (1).

LASTLY, there is a Rest of all the most interesting to mankind, I mean Peace, that happy Rest, which follows the Trepidations and Ravages of War.

AND now having done with Rest, let us bring the whole to a conclusion.

diu enim deliberatur, consilium vacillat, et sententia fiuctuat; ubi certum ac statutum est, quod quis facere vult, consistit consilium, et STAT SENTENTIA. Sanct. Minerv. 1. iv. c. 4. p. 637. Edit. Amst. 1733.

In Perizonius's Note upon this part of Sanctius, it appears that SEDET is used in the fame fignification, and for the same reasons. See the Note following.

(l)— ἐτι δὲ κὰ ἡ νόησις ἔοικεν ἡρεμήσει τινὶ, κὰ ΕΠΙΣΤΑΣΕΙ μᾶλλον ἡ κινήσει—Intellection appears to refemble a certain Resting and Standing still, rather than a Motion. De An. l. i. c. 3. See Hermes, p. 368, where this Etymology is treated of more at large.

WE have faid already, that the Caufe Chap. of all Animal Motion is Good, either XVII. real or apparent. It is a farther Requifite, that it should be Goop, which is wanting; Good at a distance: for were it present, the Motion would then be superfluous. Thus we see the meaning of the Philosophical Critic, Scaliger: Mo-TIONIS ENIM APPETENTIA CAUSA EST ; APPETENTIÆ, PRIVATIO (m): The Caufe of Motion is Appetition; of Appetition, is PRIVATION. 'Tis to this PRI-VATION or WANT, that the Wisdom of all Ages has imputed Industry, Perseverance, and the Invention of Arts and Sciences.

THIS, in Virgil, is the-

- duris urgens in rebus EGESTAS (n).

⁽m) Scalig. de Causis Ling. Lat. c. 114.

⁽n) Geor. i. 146. See Vol. first, p. 257, p. 273,

Chap. XVII.

To this alludes Epicharmus, the Poet and Philosopher:

Πωρεσιν ήμῖν πάντα γὰς τ' ἀΓαθ' οἱ θεοί (ο).

Sell us all Goods at Labour's painful price.

To this alludes the Scripture, at Man's earliest period,—In the sweat of thy face shalt thou eat bread (p).

But the Want be thus effential to fet Man, and not only Man, but all animal Nature, in Motion, yet is Want itself an Imperfection; and to be in want is to be imperfect. And hence it follows, that true Greatness, or Superiority of Nature, consists not in having many Wants, even the we can find means to get them

⁽⁰⁾ Xenoph. Mem. 1. ii. c. 1.

⁽p) Gen. iii, 19.

gratified; but in having as few as pof- Chap. fible, and those within the compass of our own abilities.

'Tis to this Doctrine that Virgil nobly alludes, when he makes Evander with an heroic dignity receive Eneas, not at the gates of a proud Palace, but at the Door of an humble Cottage:

Ut ventum ad sedes, hæc, inquit, limina victor

Alcides subiit; hæc illum regia cepit:

AUDE, hospes, CONTEMNERE OPES, et te QUOQUE DIGNUM

FINGE DEO; rebusque veni non asper egenis (q).

Conformable to the fame way of thinking is what Socrates says to Antipho in Xenophon: "You seem (fays he) O An-" tipho, to be one of those, who imagine

⁽q) En. viii. 362.

Chap. XVII. " Happiness to be Luxury and Expences

"But I for my part esteem THE WANT=

"ing of nothing, to be Divine; and

"THE WANTING OF AS LITTLE AS

60 POSSIBLE, to come NEAREST TO THE

"DIVINITY; and, as THE DIVINITY IS

" MOST EXCELLENT, So the being NEAREST

"TOTHE DIVINITY is the being NEAREST

"TO THE MOST EXCELLENT (r)".

ARISTOTLE feems to have followed his old Master (for such was Socrates), with respect to this Sentiment. "To that Being, (says he) which is IN THE

" MOST EXCELLENT STATE, HAPPINESS

" appears to appertain WITHOUT ACTION

"AT ALL; to the BEING NEAREST to

"the most perfect, thro' a small and

⁽r) "Εοικας, ω 'Αντιφων, την ευδαιμονίαν οἰομένως τρυφην ης πολυτέλειαν εἶναι' ἐγω δὲ νομίζω το μὲν μησωνός δεῖσθαι, θεῖον εἶναι, το δὲ ως ἐλαχίςων, ἐγθυτάτω τὰ Θείκ' κὰ τὸ μὲν Θεῖον, κράτιςον, το δὲ ἐγθυτάτω τὰ Θείκ, ἐγθυτάτω τὰ κρατίςκ. Χεπορh. Μεπ. 1. i. c. 6. Sect. 10.

XVII.

single action; to those the most Chap. " REMOTE, thro' ACTIONS MANY AND " various (s)." He soon after subjoins the reason, why the most excellent Being has no need of Action. "It has (fays he) " WITHIN ITSELF THE FINAL CAUSE," that is to say, perfect Happiness: but ACTION ALWAYS EXISTS IN TWO, when there is both A FINAL CAUSE, and A Power to obtain it, each of them separate, and detached from one another (t).

AND

When a Being finds it's Good fully and wholly within itself, then, itself and it's Good being ONE, it finds no Gg Cause

^{(5) &}quot;Εοικε γάρ τῷ μὲν ἄριςα ἔχοντι ὑπάρχειν τὸ εὖ ανευ ωράξεως τῷ δὲ ἐγδύτατα, δια ολίγης κὸ μιᾶς. τοις δε ωορρωτάτω, δια ωλειόνων. Arift. de Calo. 1. ii. c. 12. p. 54. Edit. Sylb.

⁽¹⁾ Τῷ δ' ὡς ἄριςα ἔχοντι ἐδἐν δεῖ ϖράξεως, ἔςς วล่อ รับ ฉบาร์ าง ซี รับรหล ที่ ปริ ชอลีรีเร รรเบ ล่ะโ รับ อื่นสาม อังลง พ ซี ยังยหล ที่, ห ง ง ง ชชาช ยังยหล. Ibid.

The following Remark may perhaps explain this Sentiment, if it should appear obscure.

Chap. XVII. AND hence perhaps we may be able to discern, why Immobility should be a peculiar Attribute to the Supreme and Divine Nature, in contradistinction to All other Beings, endued with Powers of Perception. To Him there

Cause of Motion, to seek that, which it possesses already. Such Being therefore, from it's very nature, is IMMOVEABLE.

But when a Being and it's Good are feparate, here, as they necessarily are Two, the distant Good, by being perceived, becomes a FINAL CAUSE OF MOTION, and thus awakens within the Being a certain Desire, of which Desire Motion is the natural Consequence. Such Being therefore by its nature is MOVEABLE.

Ammonius, in the following Quotation, appears to have had this Doctrine and these Passages of Aristotle in his view.

"Όσα γευ ωλειόνων τινών δέεται, ωλείονας κινήσεις κινείται τὰ δὲ ολιίοδεᾶ, ολιίοκίνητα ἀμέλει το Θείον, ἀνενδεὲς ον, κ) ωάντη ές ιν ἀκίνητον— All such Beings, as are in want of many things, are moved in many Motions; those, who have few Wants, have few Motions; but THE DIVINITY, being WITHOUT WANTS, is therefore PERFECTLY IMMOVEABLE. Ammon. in Præd. 144. B. 145.

are no Wants, nothing absent which is Good, being himself the very Essence of pure Perfection and Goodness (u).

Chap. XVII.

AND so much for that Motion which, tho' subsequent in contemplation to the Physical (x), and thence called METAPHY-sical, is yet truly prior to it in the real order of Beings, because it appertains to the First Philosophy. So much also for the Theory of Motion.

⁽u) See before, p. 161, 162.

⁽x) See before, p. 409.

C H A P. XVIII.

Conclusion — Utilities deducible from the Theory of these Arrangements—Recapitulation.

Chap. XVIII. A ND thus having finished the Doctrine of these Philosophical Arrangements, or, in other words, of Categories, Predicaments, Comprehensive or Universal Genera, (for we have called them indifferently by every one of these names) together with such Speculations both previous and subsequent (a), as were either requisite to explain the Subject, or else naturally arose out of it; we imagine the Utilities of this knowlege will be obvious to every one, who has studied it with impar-

⁽a) See before, p. 35, 36, 360, 361, and below, p. 464.

tiality, and has aimed to know, what it really is.

Chap. XVIII.

In the first place, as we have usually begun the consideration of each Arrangement from Speculations respecting Body, and have thence made a Transition to others respecting Mind; we may hence mark the Connection between these two great Principles, which stand related to each other, as the Subject and its Efficient Cause, and in virtue of that Relation may be said to run thro' all things (b).

AGAIN, our Mind, by this orderly and comprehensive Theory, becoming furnished, like a good Library, with proper Cells or Apartments, we know where to place our Ideas both of Being and it's Attributes, and where to look for them again, when we have occasion to call

⁽b) See before, p. 34.

454

XVIII.

Chap. them forth. Without some ARRANGE-MENT of this fort, the Mind is fo far from increasing in Knowlege by the Acquisition of new Ideas, that, while it increases the Number of these, it does but increase it's own Perplexity, It is no longer a Library well regulated, but a Library crowded and confused,

> - ubi multa supersunt, Et dominum fallunt——— (c).

AGAIN, as these ARRANGEMENTS have a necessary Connection with the whole of Existence; with all Being or SUBSTANCE on one hand, with every possible Accident or Attribute on the other: it follows of course that so general a Speculation must have naturally introduced many others; Speculations, not merely Logical, but extending to Physics, to Ethics, and even to the First

⁽c) Horat. Epift. 1. i. 6.

Philosophy (d). The Reader from these Chap. incidental Theorems (if the Author has succeeded in his endeavours to represent them) will have a taste how the Ancients wrote, when they reasoned upon these Subjects, and may gratify his curiofity (if he please) by comparing them with the Moderns.

XVIII.

IT was not from an offentatious wish to fill his page with Quotations, that the Author has made such frequent and copious extracts from other Authors. He flatters himself, that by this he has not only given authority to the Sentiments, but relieved also a Subject, in itself rather fevere. From the Writers alleged, both ancient and modern, the Reader will perceive, how important and respectable these Authorities are. He will perceive too, that, in the wide regions of Being, some Sages having cultivated one part,

⁽d) See before, p. 16.

456

Chap. XVIII. and some another, the Labours of Ancients and Moderns have been often different, when not hostile; often various, when not contradictory; and that, among the valuable discoveries of later periods, there are many so far from clashing with the ancient doctrines here advanced, that they coincide as amicably, as a CHILLINGWORTH and an ADDISON in the same Library; a RAPHAEL and a CLAUDE in the same Gallery.

It is not without precedents, that he has adopted this manner of Citation. It was adopted by Aristotle long ago in his Rhetoric and his Poetics. Aristotle was followed by those able Critics, Demetrius, Quin Etilian, and Longinus. Chrysippus, the Philosopher, so much approved the method, that in a single Tract he inserted nearly the whole of that celebrated Tragedy, the Medea of Euripides: so that a person, who was perusing the Tract, being asked what he was reading, replied

replied pleasantly, 'Twas the Medea of Chap. Chrysippus (e). Cicero has enriched his XVIII. philosophic Treatifes with many choice morfels both from Greek and Roman Writers; and this he does, not only approving the practice himself, but justifying it by the practice of the Philosophers then at Athens, among whom he names Dionyfius the Stoic, and Philo the Academic (f). Seneca and Plutarch both pursued the same plan, the latter more particularly in his moral Compositions. To these may be added, tho' of a baser age, my own learned Countryman, John of Salifbury (g), who, having perused and fludied

⁽e) Diog. Laert. 1. vii. § 180.

⁽f) Tusc. Disput. 1. ii. § 10.

⁽g) This extraordinary Man flourished in the reign of Henry the fecond, and was therefore of Old Salisbury, not of New Salisbury, which was not founded till the reign of Henry the third. John (of whom we write) having had the best Education of the time, and being not only a Genius, but intimate with the most eminent Men, in particular with Pope Adrian (who

Chap. XVIII. studied most of the Latin Classics, appears to have decorated every part of his Works with splendid fragments, extracted out of them. Two later Writers of Genius have done the same in the narrative of their Travels; Sandys at the beginning of the last Century, and Addison at the beginning of the present.

And so much by way of Apology for the Author himself. But he has a farther Wish in this exhibition of capital Writers; a Wish to persuade his Readers, of what he has been long persuaded himself, that every thing really elegant, or sublime in composition, is ultimately referable to the Principles of a sound Logic; that those Principles, when Readers little think of them, have still a latent

⁽who was himself an Englishman) became at length a Bishop, and died in the year 1182. See Fabricius in his Bibiioth. Lat. v. ii. p. 368, and in his Biblioth. Med. et Insim. atat. See also Cave's Histor. Literar. v. ii. p. 243.

force, and may be traced, if fought after, even in the politest of Writers *. Chap. XVIII.

By reasoning of this kind he would establish an important Union; the Union he means between TASTE and TRUTH. 'Tis this is that splendid Union, which produced the Classics of pure Antiquity; which produced, in times less remote, the Classics of modern days; and which those, who now write, ought to cultivate with attention, if they have a wish to survive in the estimation of posterity.

Taste is, in fact, but a Species of inferior Truth. 'Tis the Truth of Elegance, of Decoration, and of Grace; which, as all Truth is similar and congenial, coincides as it were spontaneously with the more severe and logical; but which, whenever destitute of that more solid support, resembles some fair but languid

^{*} See the numerous Quotations thro' every part of this Treatife.

Chap. XVIII. Body; a Body, specious in feature, but deficient as to nerve; a Body, where we seek in vain for that natural and just perfection, which arises from the pleasing harmony of Strength and Beauty associated.

RECOMMENDING an earnest Attention to this Union, we resume our Subject by observing, that 'tis in contemplating these orderly, these comprehensive Arrangements (h), we may see whence the sub-ordinate

⁽b) There are few Theories fo great, so comprehenfive, and so various, as the Theory of these PREDI-CAMENTS, or PHILOSOPHICAL ARRANGEMENTS.

The Ancients had many methods of representing Works of such a diversified and miscellaneous character.

Fruits of various kinds, promiscuously blended, used to be presented in a Dish, as an offering to Ceres. This Dish, so filled, they called Lanx Satura; and hence Lanx Satura, or rather Satura, or Satira slone (Lanx being understood) came to signify by metaphor a miscellaneous writing; such as were the Compositions of Lucilius, Horace, Persius, Juvenal, and others.

ordinate Sciences and Arts all arise: Hif- Chap. tory, natural and civil, out of Sub-STANCE ;

XVIII.

A Satire in this sense did not mean Sarcasm. Calumny, or personal Abuse; it meant no more than a Writing, where the Subject was various and diversified, such as Juvenal well describes it, when he speaks of his own works:

Quicquid agunt homines, nostri est FARRAGO libelli.

Again, we all know that Groves and Forests are diversified with Trees; with Trees of various Figures, Magnitudes, and Species; and hence it was that Statius called his miscellany Collections of Poems by the name of SILVÆ.

Now it was from these ideas that Mr. Stuart, with his usual Taste and Classical Elegance, has designed the Frontispiece, which adorns this Volume.

We there behold a Temple of the Tuscan Order, dedicated to Ceres; to which Goddess a Roman of distinction, with proper attendants about him, is making an offering of the LANX SATURA, or Dish of promiscuous Fruits. Behind we see a GROVE, which, besides the propriety of being an usual place for Temples, has a fine effect in forming the back-ground of the Piece.

The LANX SATURA and the GROVE equally contribute to denote the Miscellaneous Character of these PHILOSOPHICAL ARRANGEMENTS.

This Account of the Lanx Satura is taken from Diomedes the Grammarian, and may be found in the Preface

Chap. XVIII. TITY; Optics, out of QUALITY and QUANTITY; Medicine, out of the same; Astronomy, out of QUANTITY and Motion; Music and Mechanics, out of the same; Painting, out of QUALITY and SITE; Ethics, out of RELATION; Chronology, out of WHEN; Geography, out of WHENE; Electricity, Magnetism, and Attraction, out of Action and Passion; and so in other instances.

EVERY Art and every Science being thus referred to it's proper Principle, we shall be enabled with sufficient accuracy to adjust their comparative value (k), by comparing the several Principles, from which they severally flow. Thus shall we be saved from absurdly overprizing a single Art, or a single Science, and from

Preface of Dacier to his Translation of Horace's Satires, and in the same Preface, prefixed also to the Satires of the Delphin Horace.

⁽k) See before, p. 34, 35.

treating all the rest with a sort of insolent contempt; advantages so little to be expected from any Knowlege less extensive, that, on the contrary, the more deeply knowing Men may be in a single Subject alone, the more likely are they to fall into such narrow and illiberal Sentiments.

Chap. XVIII.

It is indeed no wonder in such case, that mistakes should arise, since those, who reason thus, be they as accurate as may be in their own particular Science, will be found to reason about one thing, which they know, and about many, of which they are ignorant; and how from Reasoners such as these, so inadequately prepared, can we expect either an exact, or an impartial Estimate?

And thus much at present for the Speculation concerning Predicaments, or Philosophical Arrangements; in the treating of which, we have considered in

PHILOSOPHICAL, &c.

Chap. XVIII.

464

the Beginning (1) such matters as were necessarily previous; in the Middle (m) we have considered the Arrangements themselves; and, in the End (n), various matters, naturally arising out of them, or which have incidentally occurred during the time of their being discussed.

AND thus this Part of Logical Speculation appears to be finished.

⁽¹⁾ See Chapter the first and second.

⁽m) See from Chapter the third to Chapter the fourteenth inclusive.

⁽n) See from Chapter the fifteenth to the Conclusion.

ADDITIONAL NOTES.

PAGE 2.—so EAGER WAS CATO FOR KNOW-LEGE, &c.] Thus Cicero describes him—quippe qui, ne reprehensionem quidem volgi inanem reformidans, in ipså curià soleret legere sæpè, dum Senatus cogeretur, nihil operæ Reipublicæ detrahens.—De Fin. III. 2.—Where 'tis worth remarking, that CATO considered his Application to Literature as no way obstructing his Duty to the Commonwealth. The Studious character and the Political in Him were united.

Ibid.—THE PATRIOT BRUTUS FOUND TIME NOT ONLY TO STUDY, BUT TO COMPOSE A TREATISE UPON VIRTUE.] Thus the fame Cicero—Placere enim tibi (Bruto scil.) admodum sensi, et ex eo libro quem ad me accuratissime scripsisti, et ex multis sermonibus tuis, Virtutem ad beate vivendum se ipså esse contentam. Tuscul. Disput. v. 1. And again,—provocatus gratissimo mihi libro, quem de Virtute scripsisti. De Fin. 1. 3.

One or two short fragments of this Treatise of Brutus are preserved in Seneca, De Consolat. ad Helv. C. ix.

As to Pericles, Epaminondas, and the other great names mentioned in the fame page with Cato and Brutus, fee the note immediately following.

Hh

P. 5.

P. 5.—FOR THE SPLENDOR OF THEIR ACTIVE CHARACTER] The following authorities may ferve to confirm the truth of this affertion.

In Plutarch's life of Pericles we read as follows—'Ο δὲ πλεῖςα Περικλεῖ συγΓενόμενος, κὰ μάλιςα περιθεὶς ὅΓκον ἀυτῷ κὰ Φρόνημα δημαγωγίας ἐμβριθές ερου, ὅλως τε μετεωρίσας κὰ συνεξάρας τὸ αξίωμα τὰ ἤθες, ᾿Αναξαγόρας ἦν ὁ Κλαζομένιος, ὁν οἱ τότ ἀνθρωποι ΝΟΥΝ προσηγόρευον. But he, who was most conversant with Pericles, and most contributed to give him a grandeur of mind, and to make his high spirit for governing the popular Assemblies more weighty and authoritative; in a word, who exalted his ideas, and raised at the same time the dignity of his behaviour: the person, who did this, was ANAXAGORAS, the Clazomenian, whom the people of that age used to call NOYΣ or MIND. Plut. in Vit. Periclis, p. 154. B. Edit. Xyland.

PLUTARCH foon after gives good reasons for this appellation of ANAXAGORAS, viz. his great abilities, and his being the first who made MIND or INTELLECT (in opposition to CHANCE) a Principle in the Formation and Government of the Universe.

The Words of Anaxagoras on this subject, though well known, are well worth citing.—Πάντα χεήματα ἢν ὁμΞ΄ εἶτα ΝΟΥΣ ἐλθων ἀντὰ διεκόσμησε. All things were BLENDED TOGETHER: then came MIND (or an Intelligent Principle) and gave them Arrangement. Diog. Laert. 11. 6.

EPAMINONDAS, in his political capacity, was fo great a man, that he raised his Country, the Commonwealth of Thebes, from a contemptible state to take the lead in Greece; a dignity which the Thebans had never known before, and which fell, upon his loss, never to rise again. The same man was a pattern in private life of every thing virtuous and amiable; so that Justin well remarks—fuit autem incertum, vir melior, and dux, esset.

CORNELIUS NEPOS, having recorded the other parts of his Education, adds—at Philosophiæ præceptorem babuit Lysim, Tarentinum, Pythagoreum; cui quidem sic fuit deditus, ut adolescens tristem et severum senem omnibus æqualibus suis in familiaritate anteposuerit, neque priùs eum a se dimiserit, quam doctrinis tanto antecessit condiscipulos, ut facilè intelligi posset pari modo superaturum omnes in cæteris artibus. Corn. Nep. in Vit. Epaminon, c. 2. Justin. His. VI. 8. Cicer. de Oratore III. 34.

As for ALEXANDER the Great, we may form a judgment, what fort of Education his Father Philip wished him to have, from that curious Epistle which he wrote to ARISTOTLE, upon ALEXANDER's birth. It is in its character so simple and elegant, that we have given it intire, as preserved by Aulus Gellius:

Φίλιππος 'Αρισοτέλει χαίρειν.

"Ισθιμοι γείουότα υίου πολλην εν τοις θεοίς χάριν έχως έχ ετως έπι τη γενέσει τε παιδός, ως έπι τω κατά την σην ηλικίαν άυτον γείουεναι έλπίζω γάρ αυτον, ύπο σε τραφέντα κ παιδευθέντα, άξιον έσεθαι κ ημών, κ της των πραίματων διαδοχής.

PHILIP to ARISTOTLE greeting.

Know that I have a Son born. On this account I am greatly thankful to the Gods, not so much for the birth of the child, as for his being born during your times: for I hope that by his being brede, and educated under you, he will become worthy of us, and worthy to succeed in the management of affairs. A. Gell. IX. 3.

What in fact this education was, we may learn not only from Alexander's History, but from an observation of Plutarch, in answer to an objection, how Alexander could venture to attack such an immense power as the Persian with such contemptible forces of his own. Plutarch says, that no sorces could be greater or fairer than the several accomplishments of Alexander's Mind—and concludes, that he marched against the Persians with better supplies som his Preceptor Aristotle, than from his rather Philip.—πλείονας παρά 'Aριςοτέλες τε καθείπτε, ή παρά ειλίππε τε πατρός άφορμας έχων, διεξαινεν επὶ siegras. Plut. de Alex. Fort. p. 327. Eair Xyland.

As for Scipio, the illustrious Conqueror of Carthage, we have this account of him and his Companion Polybius (to whom we may add also Panætius) from Velleius Paterculus ——Scipio tam elegans liberalium studiorum, omnisque dostrinæ et austor et admirator suit, ut Polybium Panætiumque, præcellentes ingenio viros, domi militiæque secum habuerit. Neque enim quisquam hoc Scipione elegantiùs intervalla negotiorum otio dispunxit, semperque aut belli, aut pacis serviit artibus; semperque inter arma et studia versatus, aut corpus periculis, aut animum disciplinis exercuit. Vell. Paterc. Histor. L. I. p. 19 Edit. Lipsii.

During the campaigns of SCIPIO, POLYBIUS attended him even in the time of Action or Engagement; as, for example, in that bold attempt, when SCIPIO, with POLYBIUS and thirty Soldiers only, undermined one of the Gates of Carthage. See Ammian. Marcel. L. XXIV. 2.

During more quiet intervals Polybius did not forget the duties of a Friend, or the dignity of a Philosopher, but gave advice, and that suitable to the character which Scipio wished to support in the Commonwealth. Among other things he advised him (as Plutarch informs us) never to quit the Forum, or place of public refort, before he had made himself some Friend, who was intimately conversant in the conduct of his fellow-citizens—

μη πρότερου ἐξ ἀγορᾶς ἀπελθεῖν, ἢ Φίλον τινὰ ποιήσασθαι, σύνεγος ὅντα τῶν πράξεων τῶν πολιτῶν. Plut. Symposiac. L. III. p. 659. Edit. Xyl.

To these instances we may add the peculiar regard which Cæsar had for the Philosopher Aristo, and Pompey for the Philosopher Cratippus. Elian well remarks on these two great Romans, that, they did not, because their power was great, despise those who had the power of doing them the greatest Services: ἐγὰς, ἐπεὶ μέγα ἐδύναντο, ὑπερεΦρόνεν τῶν τὰ μέγιςα ἀυτες ἐνῆσαι δυναμένων. Elian. Var. Hist. VII. 21.

In the same author, L. III. C. 17. there is an express differtation on this subject, worthy of perusal, as being filled with examples both from the *Grecian* and *Roman* History.

To these citations I shall add only one or two more.— Et certè non tulit ullos hæc Civitas aut glorià clariores, aut auctoritate graviores, aut humanitate politiores, P. Africano, C. Lælio, L. Furio, qui secum eruditissimos homines ex Græcià palam semper habuerunt. Cic. de Orat. 11. 37.

In the fame work, to prove the Union of the PHILOSO-PHICAL character and the POLITICAL, we have the following testimony, taken from the history of those Sages, so much celebrated in antiquity, PITTACUS, BIAS, SOLON, &c. Hi omnes, præter Milestum THALEM, CIVITATIBUS SUIS PRÆFUERUNT. De Orator. III. 34.

See also Cicero's tract stilled Orator, Sect. 15. p. 137. Edit. Oxon. and the Phædrus of Plato, p. 1237, Edit. Ficini, in both which places the intimacy above-mentioned between Pericles and Anaxagoras is recorded, and the importance also of this intimacy, as to the weight it gave Pericles in the Commonwealth of Athens.

P. 55—TO THE BETTER CO-ARRANGEMENT. OF, &c.] To the Quotations here given may be added the following one from VARRO.

PYTHAGORAS Samius ait omnîum rerum initia esse Bina: ut sinitum et insinitum, bonum et maium, vitam et mortem, diem et nocsem; quare item duo, status et motus. Quod stat aut agitur; Corpus: ubi agitatur, Locus: dum agitatur, Tempus: quod est in agitatu, setio. Quadripartitio magis sic elucebit: Corpus est, ut cursor: Locus, stadium quâ currit: Tempus, hora quâ currit: setio, curso. Quare sit, ut omnia sere sint quadripartita, et ea æterna; quod neque unquam Tempus, quin suerit Motus, (ejus enim inter-

intervallum Tempus;) neque Motus, ubi non Locus et Corpus; (quod alterum eft, quod movetur; alterum, ubi;) neque, ubi fit agitatus, non Actio ibi. Igitur Initiorum quadrigæ, LOCUS et CORPUS, TEMPUS et ACTIO.

PYTHAGORAS the Samian says that the Principles of all things are two and two, or double: as for example, Finite and Infinite, Good and Evil, Life and Death, Day and Night; and by the same rule, Rest and Motion. [In these last] that which rests or is agitated, is Body; the Where it is agitated, is Place; the Whilst it is agitated, is TIME; and in the agitation itself we view the Action.

This fourfold Division will better appear as follows. Call Body, the Person who runs; call Place, the Course, over which he runs; call Time, the hour during which he runs; and let the Race or Running, he called the Action.

Now it happens, that almost all things are in this manner fourfold, and this fourfold Division is as it were eternal. The reason is, there never was Time, but there must have been Motion, (of which Time indeed is but the Interval;) nor Motion, but where there must have been Place and Body; (one of which is the thing moved; the other, that where it is moved;) nor Agitation, but where there must have been Assian.

And hence it follows, that Place and Body, Time and Action, form, as it were, a joint Quaternion of Principles. Varr. de Ling. Lat. L. 4. p. 7 Eait. Amstel.

We have given this Passage at length, not only as it explains Co-arrangement, but as it exhibits to us four of those Predicaments or Arrangements, which make Parts H h 4

of this Treatife, viz. Substance, When, Where, Action.

P. 85.— OF PURE AND ORIGINAL BODY]—
Συνεχὲς μὲν ἔν ἐςι τὸ διαιρετον εἰς ἀεὶ διαιρετά· σῶμα δὲ, τὸ πάντη διαιρετόν μεγέθες δὲ, τὸ μὲν ἐφ' ἐν, γραμμή·
τὸ δ' ἐπὶ δύο, ἐπίπεδον· τὸ δ' ἐπὶ τρία, σῶμα· κὰ παρὰ
ταῦτα ἐκ ἔςιν ἄλλο μέγεθος, διὰ τὸ τὰ τρία πάνλα εἶναι,
κὰ τὸ τρὶς πάντη.—CONTINUOUS is that, which is divifible into Parts infinitely divifible; Body is that, which is
every way divifible. Of Extensions, that which is divisible
one way, is a LINE; that which is divisible two ways, is a
Superficies; that which is divisible three ways is Body;
and besides these, there is no other Extension, because Three
are All, and Thrice [Divisible] is every way [Divisible]. Aristot. de Cælo, L. I. c. I.

In Support of this last Idea (that the Term Three implies All) Aristotle refers to the common practice of his own Language—τὰ μὲν γὰς δύο ΑΜΦΩ λέγομεν, τὸ τὲς δύο ΑΜΦΟΤΕΡΟΥΣ, ΠΑΝΤΑ δ' ἐ λέγομεν αλλὰ κατὰ τῶν τριῶν ταύτην τὴν προσηγορίαν Φαμὲν πρῶτὸν. We call (says he) two things, or two persons, Both; but we do not call them All: it is with regard to Three, that we first apply this Appellation (viz. the Appellation of All.) Arist in loc.

This is true likewise in Latin; and is true also in English. Even the vulgar with us would be surprised were they to hear any one say, Give me ALL TWO, instead of Give me BOTH.

For the Grammatical Idea of Both see Hermes, p. 226.

The French, by a strange solecism, say Tous DEUX, a fault which we should not expect in an elegant language, corrected and refined by so many able writers.

P. 90.— CAN NEVER SUBSIST WITHOUT IT.] MATTER and ATTRIBUTE are effentially diffinct, yet like Convex and Concave, they are by nature inseparable.

We have already spoken as to the Inseparability of Attributes: we now speak as to that of Matter.

Ἡμεῖς δὲ Φαμὲν ΰλην τινὰ τῶν σωμάτων τῶν αἰσθητῶν ἀλλά ταύτην ἐ χωρις ἡν, ἀλλ' ἀεὶ μετ' ἐναντιώσεως—
We fay there is a certain MATTER belonging to all Bodies, the Objects of Sense; a Matter, NOT SEPARABLE, but ever existing with some Contrariety.

Soon after—'Αρχην μεν η πρώτην ύποθεμένες είναι την ὑλην, την ἀχώρισον μεν, ὑποκειμένην δὲ τοῖς ἐναντίοις — First, and for a Principle, we lay down Matter, which is inseparable from the Contraries, and is their Sub-JECT or Substratum. Arist. de Gen. et Corr. Lib. 2. p. 34, 35. Edit. Sylb.

By Contraries in this place he means the feveral Attributes of Matter, such as Hot and Cold, Black and White; Moist and Dry, &c. which are all of them Contrary one to the other, from some or other of which Matter is always INSEPARABLE.

P. 116.—Animating Forms, which though themselves not Body, are yet] — ὅσων γάρ ἐςιν ἀρχῶν ἡ ἐνέρ[εια σωματική, δῆλον ὅτι τάυτας ἄνευ σώματος ἀδύνατον ὑπάρχειν οἷον βαδίζειν ἄνευ ποδῶν. ὥςε

κή θύραθεν είσιέναι άδύνατου-λείπεται δε τον ΝΟΥΝ MONON θύραθεν ἐπεισιέναι, κ ΘΕΙΟΝ είναι μόνου εδὲ γάρ αυτέ τη ένεργεία κοινωνεί σωματική ένέρ[εια-As many Faculties or Principles of the Soul as require bodily or corporeal Energy, [that is, which require a Body or an Organ to enable them to act | thefe, 'tis evident, cannot exist without a Body; as for example, the locomotive Faculty of walking cannot exist without Feet : so that for such Faculties to pass into the Body from without [originally separate and detached from it] is a thing impossible. -- It remains therefore that MIND or INTELLECT ALONE should pass into us FROM WITHOUT [that is, be separate and wholly detached] and should ALONE be something DIVINE, because with the Energy of this Faculty Bodily Energy has no communication—that is, there is no want of corporeal Organs for reasoning and thinking, as there is want of Eyes, for Seeing, or of Ears for Hearing. Arist. de Animal. Gen. L. II. c. 3. p. 208, 209, Edit. Sylb.

In another Place, speaking of those Parts of the Soul, which are inseparable from Body, because they cannot energize without it, he adds-There is however no objection why some Parts should not be separable; and that, because they are the Energies of no one Body whatever. Befides (he goes on and fays) it is not yet evident, whether the Soul may be not the Life and Energy of the Body, in the same manner as the Pilot is the Life and Energy of the Ship .-Οὐ μην ἀλλ' ἔνιά γε εθεν κωλύει, διὰ τὸ μηθενὸς εἶναι σώματος έντελεχείας. Έτι δε άδηλου, εί ούτως έντελέχεια τε σώματος ή ψυχή, ώσπες πλωτής πλοίε. Arist. de Animâ, II. c. 1.

In this last instance he gives a fine illustration of the Supreme and divine Part of the Soul, that is, the MIND or INTELLECT. It belongs (it feems) to the Body, as

a Pilot does to the Ship; within which Ship, though the Pilot exist, and which said ship though the Pilot govern, yet is the Pilot notwithstanding no part of the Ship: he may leave it without change either in the Ship or in himself; and may still (we know) exist when the Ship is no more.

P. 129. — EA CURA QUIETOS SOLLICITAT?] 'Twas the advice of the EPICUREANS with regard to themselves, not to marry, not to have children, not to engage in public affairs— ε γαρ γαμητέου, αλλ' εδε παιδοποιητέου, αλλ' εδε πολιτευτέου. Arrian Ερίει. III. 7. p. 384. Edit. Upt. The political Life, according to them, was like that of Sisiphus, a Life of labour which knew no end.

Hoc est adverso nixantem tundere monte Saxum, quod tamen a summo jam vertice rursum Volvitur, et plani raptim petit æquora campi. Lucret. III. 1013, &c.

Hence, with regard to their Gods, they provided them a fimilar Felicity; a Felicity, like their own, detached from all attention. Thus HORACE, when an Epicurean—

— Deos didici SECURUM AGERE ÆVUM, Nec, si quid miri faciat natura, DEOS id TRISTES ex alto cæli demittere tecto. Hor. Lib. I, Sat. V.

Thus Epicurus himself—το μακάριου κ) ἄφθαρτου ἔτε ἀυτο πράγματα ἔχει, ἔτε ἄλλω παρέχει——
That which is Blessed and Immortal (meaning the Divine Nature) has neither itself any business, nor does it find business for any other. Diog. Laert.

2. 139.

Ausonius has translated the sentiment in two Iambics, Ep. cxvi:

Quod est beatum, morte et æternum carens, Nec sibi parit negotium, nec alteri.

See also Lucretius I. 57. VI. 83, whom Horace feems to have copied in the verses above quoted.

'Tis true this Idea destroyed that of a Providence; but to them, who derived the World from a fortuitous Concourse of Atoms, such a consequence was of small importance.

P. 131.—And scape thy notice.]

To the Citations in the note p. 150, may be added the following fine fentiment of THALES—'Ηρώτησέ τις ἀυτον, εἰ λήθοι Θεὰς ἀνθρωπος ἀδικῶν' ἀλλ' ἐδὰ διανοέμενος, ἔφη—One afked him, if a man might escape the knowlege of the Gods, when he was committing Injustice: No, says he, not even when he is MEDITATING it. Diog. Laert. i, 36.

P. 138.—Who is it, that comprehends the Whole?]

This Reasoning and that in Hermes, p. 362, abundantly shew the Supremacy of the Mind among the Faculties of the Human Soul. 'Tis Mind that sees the Difference not only between Black and White, Bitter and Sweet, but (which no sense is equal to) the difference between Black and Bitter, White and Sweet, and the various tribes of heterogeneous Attributes. Nor does it shew this Supremacy in these Recognitions only,

but likewise, when under one and the same view it recognises Objects of Sense and of Intellect united, as in case of Syllogisms made of Propositions particular and universal, such as, (if I may be permitted to speak after so scholastic a manner) such as the Syllogisms Darii and Ferio in the First Figure.

To this may be added, that this joint Recognition of things multiform, contrary, and heterogeneous, and that by THE SAME FACULTY, and in THE SAME UNDIVIDED INSTANT, feems to prove in the strongest manner that such FACULTY, (by this Faculty I mean the MIND or INTELLECT) must be INCORPOREAL; for Body, being infinitely divisible, is by no means susceptible of such a simple and perfect Unity, as this Recognition must necessarily be.

P. 192.—The Mountain, which by its relation to the Molehill was great, by &c.]

This may be true with regard to Mountains, and Molehills, and the other more indefinite parts of Nature; but with regard to the more definite parts, such as Vegetables, and Animals, here the Quantities are not left thus vague, but are, if not ascertained precisely, at least ascertained in some degree.

Thus Aristotle— Εςιγάρτι ωᾶσι τοῖς ζώοις ωτέρας τε μεγέθες διο κς τῆς τῶν οςῶν ἀυξήσεως. Εἰγὰρ ταῦτ' εῖχεν ἀυξησιν ἀεὶ, κς τῶν ζώων ὅσα ἔχει οςοῦν ἡ τὸ ἀνάλογον, ἡυξάνετ' ἀν ἔως ἔζη. All Animals have a certain Bound or Limit to their Bulk; for which reason the Bones have a certain Bound or Limit to their growth.—Were the Bones indeed to grow for ever, then of course, as many Animals as have Bone, or something analogous to it, would continue

continue to grow as long as they lived. Arist. de Anim. Gener. ii. 6. p. 227. Edit. Sylb.

What follows from Simplicius is to the same purpose; only where he mentions FORM, we must understand that efficient animating Principle, described in the sixth chapter of this work.

Εκαςου Είδος συνυπάγει, μετα τῶς οἰκείας ἰδιότητος, κό ποσέ τι μέτρον σύμμετρον τη ιδιότητι έγαρ χήμα μόνον ἐπιφέρει μεθ' ἐαυτε τὸ εἶδος, άλλα κ μέγεθος, ὁ μετα διαςάσεως είς την ύλην παραγίγνεται. Πλάτος δε έχει κλ τετο ευθάδε δια το αόρισου πώς της ενύλε Φύσεως. Εαν δε πολύ τον όρου παραλλάξη, η προς το μειζου, η προς το έλατίου, τέρας νομίζεται. Every FORM introduces, along with its own original Peculiarity, a certain meafure of Quantity, bearing proportion to that Peculiarity; for it brings with itself not a FIGURE only, but a MAGNITUDE also, which passes into the Matter, by giving it extent. Now even here this Magnitude has a fort of latitude, from the indefinite nature of the material Principle [with which it is united.] But yet, notwithstanding if it change the Bound or Limit, either as to greater or to less, in a remarkable degree, the Being [by fuch deviation] is esteemed a Monster. Simplic. in Præd. p. 37. A. Edit. Basil.

SIMPLICIUS gives examples of this Deviation in the case of Giants and of Dwarfs.

P. 244.—SPECTATORS—MADE OUT OF THOSE THAT WENT BEFORE.] The Subject Matter is the fame in many fucceeding Beings; as the River is the fame; which, as it flows along, reflects many different Objects. Tis in this fense we are to understand the following After-

Affertion, and not with the least view to equivocal Production:

Όυκεν δια το την τέδε φθοραν άλλε είναι γένεσιν, κ την τέδε γένεσιν άλλε είναι φθοραν, άπαυς ον αναίκαιον είναι την μεταβολήν. Wherefore, from the Diffolution of one thing being the Generation of another, and the Generation of one thing being the Diffolution of another, it necessarily follows that the Change must be perpetual and never cease. Arift. de Gen. et Corr. L. I. C. 3. p. 10. Edit. Sylb.

The Change here alluded to is the common course of Nature in the Production of Beings, which, were it not for the Process above-mentioned, would either soon be at a stand, or would require a perpetual Miracle for the supply of new Materials.

P. 278.—THE THEORY OF ACTION AND REACTION.]

Of this Doctrine we have the following account.—
Αἴτιον δὲ τε μὲν λύεσθαι τὰς κινήσεις, ὅτι τὸ ποιεν κỳ πάχει ὑπὸ τε πάχοντος οἶον τὸ τέμνον ἀμελύνεται ὑπὸ τε τεμνομένε, κỳ τὸ Θερμαϊνον ψύχεθαι ὑπὸ τε Θερμαινομένε, κỳ ὅλως τὸ κινεν (ἔξω τε Πρώτε) ἀντικινεῖταί τινα κίνησιν οῖον ἀθεν ἀντωθεῖταί πως, κỳ ἀντιθλίσεται τὸ Θλίσον. The Caufe why Motions are flopt, is, that THE ACTING POWER IS ALSO ACTED UPON BY THAT, UPON WHICH IT ACTS; for example the cutting Power is blunted by that which is cut; and the warming Power is cooled by that which is warmed; and in general the moving Principle (excepting the SUPREME and FIRST) is reciprocally moved itself under some motion or other; the impelling Power,

Power, for instance, is after a manner re-impelled; and the compressing Power, after a manner re-compress. Aristot. de Animal. Gener. L. 4. p. 280. Edit. Sylb.

P. 281. — DOUBLE IN ITS POWERS, &c.]
'Iκανον γαρ θάτερον μέρος της εναντιώσεως, εαυτό τε κρρίνειν, κρ το αντικείμενου' κραρ τῷ εὐθεῖ κραντούν το δε κάμπυλου γινώσκομεν, κριτης γαρ τῷ εὐθεῖ κρανών' το δε κάμπυλου, ἔθ' εαυτε ἔτε τε εὐθεος. — One of the two Parts in the Contrariety is sufficient to judge both itself and its opposite. 'Tis thus that by the Strait we come to know both the strait and the crooked, for the strait Rule of the Artist is a judge of both. But the crooked on the other side is no judge either of itself, or of the Strait. Arist. de An. 1, 5.

P. 283. — EXISTED PREVIOUSLY IN ENERGIE.]

Oσα Φύσει γίγνεται η τέχνη, υπο ενεριεία υντος γίγνεται εκ τε δυνάμει τοιέτε. — Whatever things are made either by Nature or by Art, are made out of something, having a capacity to become the thing produced, and that THROUGH the operation of something, which already exists in Energy. De Animal. Gener. p. 204. Edit. Sylb.

P. 297.—AS THEY STAND RELATED TO PLACE] The Force of this Arrangement or Predicament WHERE, is finely contrasted with the Predicament of QUANTITY, in that Laconic Apophthegm of AGIS. The Lacedæmonians (said he) do not ask HOW MANY the Enemies are, but WHERE they are: Οὐκ ἔφη δὲ τὸς Λακεδαιμονίες ἐρωτᾶν ΠΟΣΟΙ εἰσὶν οἱ πολέμιοι, ἀλλὰ ΠΟΥ εἰσιν. Plut. Lacon. Apophth. p. 215. D. Edit. Xyland.

P. 332.—THE DYING GLADIATOR, &c.] To these Attitudes may be added that, given by Lysippus to the

the Statue of ALEXANDER the Great. That Prince had a certain Extension of Neck, which made him gently recline it upon his left Shoulder. When his Figure was cast in brass by Lysippus, the Artist ingeniously contrived to convert this natural defect into an Attitude of Magnificence. His Head, being reclined, was made, with a fort of insolent look, to contemplate the Heavens, as if things below were already at his command. And hence the meaning of that celebrated Epigram, in which this Work of Brass is supposed to address Jupiter in the sollowing words;

Αὐδάσουτι δ' ἔοικευ ὁ χάλκεος, εἰς Διὰ λεύσσων, Γᾶν ὑπ' ἐμοὶ τίθεμαι· Ζεῦ, σῦ δ' Όλυμπου ἔχε.

The Brass looks up to Jove, and seems to cry, This Earth is MINE; do THOU possess the Sky.'

Plutarch. de Vitâ et For. Alex. p. 335. Edit. Xyland. See also Brodæi Epigram. Gr. L. IV. p. 454. Edit. Franc. 1600, where the Lines here cited are introduced by two others.

P.337.—FROM POETS TO ACTORS, &c.] See Cic. de Orat. iii. 56, 57, 58, 59. Edit. Pearce, where 'tis worth remarking, (c. 59.) fo much stress is laid on the management of the Countenance, and of the Eyes in particular, that we are informed the old men of that age did not greatly praise even Roscius himself, when he appeared in his Mask—quo melius nostri illi senes, qui PERSONATUM ne Roscium quidem magnopere laudabant; ANIMI est enim omnis Actio; et imago animi vultus est, indices oculi.

P. 355.—MOUNTAINS CLOATHED WITH WOOD.] Thus CICERO—Spatia frugifera atque immensa camporum, vestitusque densissimos montium, pecudum passus, &c. DeNat. Deor. ii. 64. p. 253. Edit. Davis.—And before, in the same treatise, he speaks of the Earth, as vestita floribus, herbis, arboribus, frugibus, &c. ii. 39. p 195.—Yet all this we must remember is but metaphorical.

P. 366.——IS SCIENCE PRIOR TO ART?] Nihil est enim, quod ad ARTEM redigi possit, nisi ille PRIUS, qui illa tenet, quorum Artem instituere vult, habeat illam SCIENTIAM, ut ex iis rebus, quarum Ars Nondum sit, Artem essicere possit. Cic. de Orat. i. 41. Edit. Pearce, &c. p. 63. Edit. Oxon.

This Citation well proves a part of what is here afferted, viz. the necessary Priority of some Science to every Art.

P. 389.—AND TO IT'S OPPOSITE NON-BEING.] These Motions under the name of Changes (μεταθολαί) are well explained, as follows.

Θταν μὲν ἔν κατὰ τὸ ωοσὸν ἢ ἡ μεταδολὴ τῆς ἐνανθιώσεως, αὐξησις καὶ Φθίσις ὅταν δὲ κατὰ τόπον, Φορά. ὅταν δὲ κατὰ ωάθ, ἢ τὸ ωοιὸν, ἀλλοίωσις ὅταν δὲ μηθὲν ὑπομένη, ἕ Βάτερον ωάθ, ἢ συμβεβηκὸς ὅλως, γένεσις τὸ δὲ, Φθορά.—When therefore the Change of the contrary Attribute is according to the QUANTITY, 'tis AUGMENTATION or DIMINUTION; when according to any Affection, or QUALITY, 'tis ALIATION. When NO-THING REMAINS, of which the new production can be

ADDITIONAL NOTES.

at all considered as an Affection, or an Attribute, 'tis then Generation; and the contrary, Dissolution. Arist. de Gen. et Corr. L. I. c. 4. p. 14. Edit. Sylb.

P. 409.—BUT WE CALL IT METAPHYSICAL.]

Philoponus in a very few words well explains the term, METAPHYSICAL: Speaking of the First and Supreme Cause of all things, he adds—— ωερὶ μὲν ἔν ἐκείνε εἰπεῖν, τῆς ωρώτης ἔςι ΦιλοσοΦίας βεολογία γὰρ εἰπεῖν, τῆς ωρώτης ἔςι ΦιλοσοΦίας βεολογία γὰρ εἰπεῖν, τῆς ΜΕΤΑ ΤΑ ΦΥΣΙΚΑ ωρα[μα]εία μαλλου δὲ ΠΡΟ ΤΩΝ ΦΥΣΙΚΩΝ, ωρὸς ἡμᾶς γὰρ ὑσερα τὰ τῆ Φύσει ωρότερα—Το speak concerning this Principle, is the business of the First Philosophy, for it is a Subject belonging to Theology, and to that Speculation, which is METAPHYSICAL, that is to say, subsequent TO MATTERS PHYSICAL, or rather indeed tis a Subject PRIOR TO MATTERS PHYSICAL, in as much as those things with regard TO US are SUBSEQUENT, which are BY NATURE PRIOR. Philop. in Aristot. de Gen. et Corr. p. 12. Edit. Ald. Venet. 1527.

415. THE COMMON NAME OF PERCEPTION.]

This word, Perception, is of the most extensive meaning, and not only includes Intellection but Sensation also, and that of the lowest degree. What is here called Perception, is by Aristotle called Knowledge.

Τυώσεως τινος σάνθα (scil. ζῶα) μετέχεσι, τὰ μὲν ωλείου, τὰ δ' ἐλάτθου, τὰ δὲ πάμπαν μικρᾶς, αἴσθησιν γὰρ ἔχεσιν ἡ δ' αἴσθησις, γνῶσίς τις. Ταύτης δὲ τὸ τίμιον κὸ ἄτιμον ωολύ διαφέρει σκοπέσι ωρὸς Φρόνησιν, κὸ ωρὸς τὸ τῶν ἀψύχων γέν. Πρὸς μὲν γὰρ Φρό-

υνσιν, ώσπερ εδεν είναι δοκεί το κοινωνείν άφης κ γεύσεως μόνου το το δε αναισθησίαν, βέλτισον. 'Αγαπητον γαρ αν δόξη το ταύτης τυχείν της γνώσεως, αλλα μη κείσθαι τεθνεώς κ) μη ον.

All Animals share a degree of KNOWLEDGE; some of them, a greater; others of them, a less; and some of them, an exceedingly small degree; for they have all of them SEN-SATION, and SENSATION IS A SORT OF KNOWLEDGE. But the Value and the No-value of Sensation is widely different, when we compare it with RATIONAL COMPRE-HENSION on the one side, and with the race of BEINGS INANIMATE on the other. With regard to RATIONAL COMPREHENSION, the mere partaking of TASTE and Touch alone, appears to be as nothing; but with regard to pure Insensibility it is something most excellent. For [when compared to Beings Insensible] it may surely appear a bleffed Event, to be possest of THIS Knowledge, and uot [refembling them] to lie as dead and a Non-entity. Aristot. de Animal. Gener. Lib. I. sub. fin. p. 197. Edit. Sylb.

P. 426.—ENDS IN IT'S ACQUISITION.]

Πάντα γὰς τὰ ζῶα κὰ κινεῖ κὰ κινεῖται ἕνεκά τινος ὅςε τετ' ἔςιν αὐτοῖς πάσης κινήσεως πέςας, τὸ ῗ ἕνεκα. All Animals both move, and are moved for the fake of something; so that this something, that is to say, THE FINAL CAUSE, is the BOUND or LIMIT of all their Motion. Arist. de Animal. Mot. C. 6. p. 153. Edit. Sylb.

P. 463.—CONCERNING PREDICAMENTS OR PHI-LOSOPHICAL ARRANGEMENTS.] Many learned and ingenious Observations on this Subject, as well as on several other parts of antient Philosophy (the Peripatetic

ADDITIONAL NOTES.

setic in particular) have been given to the World in a Tract lately published, styled, On the Origin and Progress of Language, in two Volumes, 8vo.

There may be found too in the fecond Volume many judicious and curious remarks on Style, Composition, Language, particularly the English; observations of the last consequence to those, who wish either to write or to judge with accuracy and elegance.

The Author of these Arrangements might have availed himself of many Citations from this Work, highly tending to illustrate and to confirm his Opinions, but unfortunately for him, the greater part of his own Treatise was printed off, before the second Volume of this Work appeared.



A BASSIDÆ, — — — 253
ABASSIDÆ, — — 253 Abderic Words, used by Democritus, 340
Action and Paffion universally diffused, 255. exist either in
the same Subject, or in different ones, 256,257. first
species of Action, that of mere Body perfectly insen-
sitive, 258. second, that of Body sensitive, 260.
third, that of Body fensitive, with Reason superadded,
261. fourth, that of Reason or Intellect devoid of
Passions, and operating on Subjects external, as in the
case of Nature and Art, 261. fifth fort, that of pure
Intellect, keeping within itself, 264. Action pure,
belongs only to the Supreme Mind D. C.
belongs only to the Supreme Mind; Passion pure,
to the primary Matter, 271. Action, three Modes
of, 273. the first Mode, ibid. the second, 274.
the third, 276
Action, in public Life often aided by Speculation,
2, 3, 4, 466, 467, &c.
Action and Reaction, - 44, 278, 479
Active and Passive, run through the Universe, 96, 109,
137, 271, 272
Adivity, pure, where it exists, 110, 171, 272
Actors, on the Stage, and in Life, 2, 337, 338, 481
Actual and Perfect, necessarily previous to their Contra-
ries, or else nothing could have been Actual and Per-
fect, 281, 480. Actual and Capable, — 401
Ii4 ABu

Actuality, 397, 398. Actuality of Capacity, where it
exists, — — — — 401, 403
Addison, 458
Adrian, Pope, — 457
Agent, same Agent leads to different Essects, when act-
ing upon different Patients, — 280
Agis, — 480
ALEXANDER, the Great, 2, 6. his flatue by Lysip-
pus, — — 481
ALEXANDER APRHRODISIENSIS, — 97
ALEXANDRINE LIBRARY, by whom burnt, 253
ALIATION, 384. See Motion.
All, its use and application in Language, 472
Alteratio, means in barbarous Latin 'Αλλοίωσις, 384
Ammianus Marcellinus, — 469
Ammonius, illustrates, where Analysis is to end, and
Practice to begin, 12. quoted, 15, 16, 22, 32, 36.
explains the utility of these Arrangements, 17. his
account of Matter and Body, 85. his Text corrected
and supplied from a Greek Manuscript, 163. quoted
213, 288, 292, 363, 364, 383, 386, 387, 389, 450.
his account of Definition, — 292
Αμφω, & Λμφότεροι, — 472
Analogy, a use of it,
Analogy and Abstraction, their use, 76, 77, 92, 162
Anaxagoras, — 2,466
Anger, 418
Angles and Flexures of the Body, — 328 Animals, all have an inward feeling of their Constitution,
and proper Nature, 411 Animating Powers, their Order and Subordination, 420,
Anteprædicamenta, – 421
Anticipation, what,
Antients, 455
Anti-

ANTIPHO, — 447
Appendages to the Arrangements, what, and how many,
360
Appetite, 262, 417
APULEIUS, — 45
ARATUS, 250
ARCHIMEDES, 306, 310, 430
ARISTO,
ARCHYTAS, wrote a Comment on the Categories, or
Predicaments, 7. his Name for them, 31. puts
Quality next after Substance, and why, 143. held an
Active and a Passive Principle, 111. enumerates the
Species of Action, 265. refers to God, for pure Ac-
tivity, 272. to Matter, for pure Passivity, ibid. De-
ARISTOPHANES, 357
ARISTOTLE, Preceptor to Alexander, 2, 467. his Rheto-
ric, quoted, 9. his Organon, explained by Ammonius,
12, 13. thought Infinite and Individuals to be un-
knowable, 21. quoted, 25. his account and Enu-
meration of the Predicaments, or universal Arrange-
ments, 32. by whom esteemed, and how long, 39.
quoted, 41, 42, 44. his Treatife σερί κόσμε, 45.
quoted, 33, 48, 49, 51. holds the necessity of Mat-
ter or a Substratum for all natural Productions, 52,
53, 54. quoted, 56. thinks Form may supply the
place of Privation, and why, 59, 60, 61. his Idea of
Matter, 66, 67, 70. he and Plate borrowed from the
Pythagoreans, 72, 76. used the methods of Analogy
and Abstraction, to prove the first Matter, 78, 79.
quoted, 91, 93, 97, 98, 105. faculties of the Soul,
how distributed, 101. quoted, 113, 117. a disciple
both of Socrates and Plato, 119. held there could be
no innate Ideas, and why, 120. quoted, 123, 132, 133,
134, 138, 143, 150, 151, 153, 156, 157, 158, 161,
171,

171, 173, 174, 175, 183, 184, 185, 186, 188, 191, 192, 193, 199, 215, 218, 219, 220, 221, 228, 234, 240, 243, 277, 282, 284, 286, 288, 299, 309, 310, 325, 330, 340, 342, 343, 345, 361, 363, 364, 370, 371, 372, 374, 375, 383, 384, 385, 391, 392, 393, 394, 396, 403, 404, 407, 408, 414, 415, 416, 417, 421, 422, 425, 429, 434, 435, 439, 442, 444, 448. follows Socrates in fentiment, ibid. 449. abounds in Quotations where, 456. his explanation of the Terms, BOTH and ALL, 4.72. Supposes Matter inseparable from its Artributes, 473. his distinction between the animal faculties, which want a corporeal organ, and those which want none, 474. compares the Soul to a Pilot, ibid. his Idea, after what manner the magnitudes of beings were limited, 477. his notion of Generation and Diffolution, 478. makes one Faculty equal to the discernment of two Contrarieties, 281, A80. makes Energy prior to Power, 480. enumerates the fix Species of Motion, 482. his extensive use of the Term Tuwois, Knowlege, 483. Supposes a Bound to Human Actions in the Final Caufe, Arithmetic, finds its subject in Quantity, 195 ARRANGEMENTS, the necessity of them, 14, 22. their extensive utility, 17, 452, 460. a method of Arrangement proposed, 24. rejected, and why, 26. another method proposed, 26 to 33. adopted, and why, 33. why called PHILOSOPHICAL ARRANGEMENTS, ib. different names given them by the Antients, 31, 32. how the Greek Logicians divided and formed their Speculations upon this Subject, 35, 36, 464. were followed by the Latins, who added names of their own coining, 36. Force of Arrangement in the intellectual World, 201, 342, 343, 344, 345. in the visible world, 340, 341. Arrangements or Categories lead us from the Contemplation of Body to that of Mind,

453. teach us how to place our Ideas in proper Order,
ib. are connected with, and introduce Speculations
of every Species and Character, 444, 445. shew the
Coincidence of many Theories antient and modern,
456. indicate the Union between Taste and Truth,
459. trace and teach the fource of subordinate Arts
and Sciences, 460, 461, enable us to adjust their
comparative Value, 34, 35, 462. to the doing of this
no particular Science is equal, and why, 35, 463
ARRIAN. See Epictetus. Arrogance, a Cause of it, — 34, 35, 462, 463
arrogance, a Caule of it, — 34, 35, 462, 463
frts, how limited each particular one, 34. Art, what it
is, what it is not, 102, 160. a difference between
Art and Nature, 165. often ends in giving Figure,
168. Arts arise from Want, 445. Arts of Painting
Music, Grammar, beholden to Contraries, 46, 47. Arts of Progression, and of Completion, 7, 8
81 1C C C 1
1 77 1
Itioms and a Void, 44, 339
331. instances from Pictures and Statues, 331. Atti-
tudes from Poets of fitting in Despair, 333. of fitting
in Dependence, ib. of conjugal Affection, ib. of
Thescelus, aiming a Javelin, 334. of Death, doing the
fame, ib. of Humiliation, 335. of lying extended,
225 226 of Sleep and Death 226 22m of Alexan
der, by Lysippus, 480, 481
Attraction, 258, 437
TTRIBUTE and SUBSTANCE, general and particular.
25. Attribute, divided into its respective Sorts or Spe-
cies, 31. this Division, the Basis of the whole Work,
23
AUGMENTATION and DIMINUTION, 385, 386. See
Motion.
Jusonius, 476
Axiom antient, 280
R

· B.

Barbarity, when it was the Eastern World, when it	was
	253
	354
Beings, why moveable, all but One, ——	-50
Bessarto, Cardinal,	238
Biasov, fee Forced,	107
BLEMMIDES, 57, 268, 2	69
D II 10	353
Body, what makes it, 85. triply extended, ibid. con	
dered, as the secondary Matter, ibid. Mathematical,	
Physical, how distinguished, —	87
Bodies, the perfectly fimilar, tho' they have Place, h	
no Situation or Position, and why, 318, 329, the sa	
holds, as to Bodies perfectly diffimilar, and why, 3	
Body human, the Soul's Organ, Tool or Instrume	
	-37
BOETHIUS, —— 16, 17, 21, 26, 2	
	•
	39
_	353
Brutus, — 2, 2	
Bulk, fometimes less ascertained, sometimes more,	na
why, 477. See Magnitude.	
C.	
CÆSAR, 304, 4	
Calm, in the Winds, Novepia, defined, 441. Calm,	in
the Sea, Tannin, defined, - 4	42
CAPACITY or Power, 278, particular Capacities,	
rious but limited, 279. far distant from Non-enti	ty,
ibid. Capacity universal, and Privation universal, 1	the
Characters of the FIRST or PRIMARY MATTE	
71. Character of Capacity, 278. Capacity double in	he
human Mind, and why, 149, 150. mediate, and is	
media .	

mediate, 152, 153. Capacity, two forts of, 160, 161.
Incapacity, 151. Capacity, its Actuality, where exist-
ing, 403. definite, though invisible, 398, 399. See
p. 65, 66. and the Word, MATTER.
CASAUBON, 3
CATEGORIES, 32, 33, 452
Сато, — — 2, 465
Cause, see Index to the first Volume.
Causes, 39, 93. invisible Causes, seen thro' visible Ef-
fects, 108. final Causes denied by Lucretius, 124,
125. maintained by Aristotle, Galen, Cicero, 127
Causative Motion, see Metaphysical.
CERES, a Sacrifice to her, described, - 461
CHALCIDIUS, — 74, 77, 80, 107, 247
Chance, 122, 123, 128, proves an intelligent Principle,
128. different accounts of it, 209 to 313. no Cause
of the World, and why, - 436, 437
Change, see Mutation.
Chaos, fee Disorder and Night.
CHARLEMAGNE, 303
CHARLES THE FIRST, — 305
CHRONICLES, 337
CHRYSIPPUS, — 456
Cicero, 2, 108, 109, 119, 153, 208, 239, 259,
309, 310, 415, 412, 419, 420, 438, 457, 465, 470,
481, 482
Citation, see Quotation.
Co-arrangement, 55, Account of it from Varro, 470
Co-existence, or Together, its Modes, or Species, 374
to 377, the Temporal Mode, 374, the Essential,
375, the Specific, 376, coincides with Relation, 376
COOKE, his Institutes, 373
Colour, a Quality, 170, why inferior, in its effects, to
Figure, — 171
Completion, a Capacity, 148, Completion and Progression,
7,.8
Consciousness,

Consciousness, — 413
Continuous, Infinite, Place, Time, - 396
CONTRARIES, effential to Mutation or Change, 42, this
a general Opinion of all Philosophers, 43. Contraries,
their extensive Influence and Operation, 45, 6, 7.
adopted by all Philosophers, 47. the necessity of a
third Being, that they may pass into each other, 50,
51. Contraries in Virtue and Vice, and even in Vices
themselves, — 173, 174
Contrariety, belongs to Quality, but not univerfally, 173
Corinthians, 337. See Scripture,
Cube. See Sphere.
Cyrus, his Speech, when dying, - 108, 118
D.
DACIER, 461, 462
DEMOCRITUS, his Principles, 44, 339. whence he de-
duced the variety, and specific differences in Nature,
Defire, moves the Body; Perception, the Defire, 425 Defirable and Intelligible, how they move, and act upon
other things, — 277
D- 317
Die Witt, 4 Digestion, 104, 434
Diogenes, (not the Cynic,) 51, 72
Diogenes Laertius, 72, 410, 412, 424, 428, 457
DIOMEDES, the Grammarian, 461
Dionysius, the Stoic, 457
Disorder and Chaos, not prior to Order, - 287
Dispositions, Tendencies, or Progressive Qualities, 154
Distinction, accurate and exact, its uses, — 378
Divine

Divine Principle, what it necessarily implies, 127. has
nothing Passive, 266
Ε,
Tonore ton Data's a Data's and a land
EARTH, her Relations and Duties, 232, 233, why
called, Most Just, ibid.
Ecclesiastes, 306. See Scripture.
Ecclesiasticus, 56
Eidos griudes, explained, — 90, 166, 387, 388
EIDOTHEA, Daughter of PROTEUS, — 82, 83
Enériou, defined, — 408
Electric Powers, — 89, 259
Elements of Beings composite, what, 62, 92, 93, how dif-
tinguished from Causes, — 92, 93
EMPEDOCLES, 122, 123, 139, his sublime Verses on
God,
Ends and Means, 121, 235. fine Speculation upon
them from Pletho, — 235 Eneas, 90, 135, 147, 447
Energy, what, 283. opposite to Power, but previous,
283. essential to the course of Events in the Universe,
284. farther proof of its being previous to Power,
285. inference from this Doctrine, 286. of what
Being, Energy is the Essence, 287. Energy and Ca-
pacity, — 401, 404
Enharmonic System, account of it in the times of Por-
PHYRY and SIMPLICIUS, — 252, 253
Έντελέχεια and Δύναμις, — 148, 399
EPAMINONDAS, 2, 467
EPHESIANS, 356. See Scripture.
Epicharmus, ————————————————————————————————————
EPICTETUS, 3, 130, 155, 225, 232, 234, 239, 267,
428
EFICURUS, his Idea of human and divine Felicity, 475

Emisnung

Eπιςήμη, its Etymology, — 444
Epigram on the statue of Alexander, 481
Equal, Similar, Same, —— 191, 211, 215
Eternal and Divine, how attained by Beings perishable
and corruptible, — 105
ETHICS, 33, 149, 155, 156, 157, 160, 173, 225, 226,
228, 261, 262, 268, 280, 282 419, 427, 428. See
the words, Metaphysics, and Physics, from which two,
together with Ethics, the Illustrations in this Trea-
tise are in great-part derived.
Etymology, use made of it by the old Greek Philosophers,
82
EVANDER, 447
Euclid, — 211, 318
Evil, Natural, and Moral, 242. Suggestions and Con-
jectures upon the Subject, 242 to 248.
Euphemismus, Origin and Use of this rhetorical Figure,
337
EURIPIDES, — 243, 338, 428, 456
Eustathius, — 81
Eustratius, 56
Exodus, 358, see Scripture.
Experiments, — 169, 195, 412
Extension, Figure, Organization, the original Forms of
Body natural. — 88
F.
FABRICIUS, - 7, 45, 458
Faculties in Man, rational and irrational, — 262
Families, their origin, — 233
Fate, Chance, applied to the purpose of Providence, and a
Deity, 311, 312
Feelings innate,412
FELL, 92, 291, 295, 316
Figure. See Extension.
Figure,

Figure, its philosophical Idea, as finely explained by SIMA
PLICIUS, 166. its importance, in consequence, 167.
mathematical, 168. imaginary, or phantastic, 170.
Figure and Number, their importance, 195
Final Causes, their importance, 127. favoured by
ARISTOTLE, 240, 449, 450. the end of human
Actions, 426, 449, 450.
First Philosophy, 33. Chap. 6. p. 139, 161, 162. truly
fo called, 367, 451, 455. See additional Note Vol. I.
p. 361, &c.
Fopp, what makes one, and why fo called — 354
Forced, how it differs from spontaneous, — 407
FORM, lifeless, its character, 54, 57, 58, 84, 91. its
most simple Species, 85. Forms effential (vulgarly called
fubstantial) their importance, 90, 164, 167, 387.
FORMs animating, and efficient, 95. how they charac-
terize, 96. Soul (in this fense) a Form, 97. Form used
in this fense by OVID, 100, 101. animating Form, its
various Efficacies and Operations, 104. Forms, Intel-
lest the Region of, 112. Forms, some inseparable from
Body, 90. others, no way connected, 116. Charac-
teristic Form, 141, 90, 164, 387. its efficacy in
Quantity, as well as Quality, 166, 432
Fortune, 128, 310. defined, ibid.
· ·
G.
Γαλήνη, fee Calm.
GALE'S Opuscula, — 72, 82
GENERA, universal, — 32, 33, 35
Generation and Dissolution, 383. how they differ from
other Motions, — 388
Generation of things, how maintained, 244, 389. that,
and Diffolution alternately prepare the way for each
other, — 244, 478, 479
GENESIS, 43, 446, fee Scripture.
Genius, what, - 159, 203
K k Gentleman,

÷ . 1.8

Gentleman, his Education, what it appears to want, to
render it complete, — — — 196
Genus and Species, formed within us spontaneously, and
originally, 18. Genera, fewer than Species; Species,
than Individuals, — 19
Geometry, finds its Subject in QUANTITY, 195
GEORGE GEMISTUS. fee PLETHO.
God, the Supreme Agent, 112. knows no Proficiency,
being ever persect, 161. Pure Mind, 162. Father of
all, 249. universal Object of Desire to all things, 250.
pure Energy of simple Intellect, 264, 271. admits no-
thing Passive, 266. his Essence, Energy, 287. ever the
same, immutable, persect, 288. immoveable, 277,
448, 450. Fate and Chance, subservient to his di-
vine Attributes, 311, 312, 313. marvelous Arrange-
ment of all Being within the DIVINE MIND, 345
Good, all Good, Truth, 430. Good Intellectual, its fupe-
rior value, 430, 431. Good absent leads to Want;
Want to Industry, Arts, &c. 445. Good, passes thro'
the Predicaments, and assumes, as it passes, different
denominations, 308. Good real or apparent moves
all Desires, 424, 425. its Effect, whether obtained,
or not, analagons to Motion Circular, - 426
Gravitation, Attraction, — 437
GREEKS, modern, short account of their Controversy
about Plato and Aristotle, 238
GROTIUS, 4
T.

H-

HABIT, OF BEING HABITED, what it is not, what it is. 348, 349, 350. its Ends, Protection, 351. Distinction, 352. Decency, ibid. Ornament, ibid. Beauty and Elegance of Dress or Habit, where to be found, 352. where it never existed, 353. Excess in attention to it, what character

character it constitutes, 354. the Trojans abused on its
account, ibid. metaphorical Uses of the Word, 355,
356. Force of its Privation, in the way both of Com-
passion and Contempt, 356, 357, 358. Privation of
it fometimes indicates Reverence, — 358
Habits, intellectual and moral, — 157
Habitude, reciprocal, — 215
Hamden, 304
Hand, the Organ of Organs, why, 113. its Fingers, their
power and efficacy, — 99
Happiness, an Account of it by the Stoics, 428
Harmony, in Music, 46. in the World, ibid. 225, between
the visible World, and the invisible, 99 of Strength and
Beauty in a perfect Body, — 460. HELVIDIUS PRISCUS, — 3
Helvidius Priscus, — 3
HEN. STEPH. POESIS PHILOSOPHICA, — 162
HERACLIDES PONTICUS, 81
HERACLITUS, 47, 245, 247
HERBERT, Lord — 4
HERCULES, — 262
HERMES, quoted 19, 76, 98, 132, 138, 140, 173,
183, 198, 202, 266, 278, 337, 342, 36z, 382, 409,
443, 444.
HIEROCLES, — 369
HOMER, 20, 80, 130, 145, 174, 210, 222, 217. joined
with Shakespeare, 227. quoted, 245, 305, 335, 337,
375
Horace, 80, 130, 149, 154, 155, 160, 182, 187,
227, 256, 260, 268, 307, 332, 337, 343, 354, 369,
370, 413, 441, 454, 460
I.
IAMBLICHUS, — 16, 206, 259
Idea, that of Motion, not a simple one, but complicated
* 3
with many others, — 397 K k 2 Ideas

Ideas innate, none, 413 to 417
Immobility, 277, 448, 449, 450
Immortal and Divine, — 115, 116
Immortality, — 117, 118, 119, 437
Impulse spontaneous, 408, 423. how caused, 424. Im-
pulse of Appetite, 417. of Anger, 418. of Reason,
419
Individuals, infinite, 19, 20, 21. how made Objects of
Science, 22, 193, 194. what Boethius and Aris-
TOTLE thought of them, — 21
Infinite, how made an Object of Science, 21, 22, 193,
194. connected with Motion, how, 395
Innate Feeling, — 412
Instincts, 149. exist, though not innate Ideas, 413
Intellect human, a Rasa Tabula, why, - 120, 415
Intellect and Science, a capital distinction between the
Faculties of each, 153. transcendent objects of Intel-
lect, peculiar to its felf,
Intelligence, purc, — — — 116
JOHN OF SALISBURY, account of him, 457
Foints and Muscles, 328
Julius Cæsar, — 274, 304
JUVENAL, 460
J 0 1 2 km - j
K.
7.20
W I will an affact or confequence of an
Knowlege, partial, an effect, or confequence of, 35,
463
L.
.⊥
Lanx fatura, fee Satura.
. 77 1
Life, focial and civil, — — — — — — — — — — — — — — — — — — —
423 L'ibe

	GZ-
plained, — 178,	215
Line, Superficies, Solid,	85
Lintel and Threshold, derive their Name and e	even
their Effence from Position,	330
Livy, — — —	256
Logic, natural, what, 9. whether an Organ to Ph	
fophy, or a Part of it, 22. fomething Progressive,	
is, to carry us on,	8
Longinus — — —	456
Lucilius, — — —	460
Lucretius, — 90, 123, 124, 125, 397,	
St. Luke, — — —	303
LYTTELTON, late Lord, an anecdote from him,	353
Lysippus, his Statute of Alexander,	480
	400
M.	
MACBETH, excellence of that Tragedy in a view to	its
MACBETH, excellence of that Tragedy in a view to	
Moral, — —	228
Moral, — — — — — — — — — — — — — — — — — — —	228438
Moral,	228 438 and
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and eing
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and eing 253
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and eing 253 onal,
Moral, — — — — — — — — — — — — — — — — — — —	438 and eing 253 onal, gent
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and eing 253 onal, gent 272.
Moral, — — — — — — — — — — — — — — — — — — —	228 438 and eing 253 onal, gent 272. the
Moral, Magnitude, limited by Nature in every Species, where there is an unufual Defect or Excefs, the Bebecomes a Monster, 477, 478. fee Bulk. Mahomet and Omar, Man, Offspring of God, 250. focial, 144. ratio 261. possess of Appetite, and Reason, and the Agof moral Actions, 262. a Compound, and how, 2 whence intitled to Praise and Dispraise, 282. specific Positions of his Body have reference to it's	228 438 and eing 253 onal, gent 272. the spe-
Moral, Magnitude, limited by Nature in every Species, where there is an unufual Defect or Excefs, the Bobecomes a Monster, 477, 478. fee Bulk. Mahomet and Omar, Man, Offspring of God, 250. focial, 144. ratio 261. possess of Appetite, and Reason, and the Asof moral Actions, 262. a Compound, and how, 2 whence intitled to Praise and Dispraise, 282. specific Positions of his Body have reference to it's cific Extensions, 325. the number of these last,	228 438 and eing 253 onal, gent 272. the fix,
Moral, Magnitude, limited by Nature in every Species, where there is an unufual Defect or Excess, the Bellecomes a Monster, 477, 478. fee Bulk. Mahomet and Omar, Man, Offspring of God, 250. focial, 144. ratio 261. possess of Appetite, and Reason, and the Assos of moral Actions, 262. a Compound, and how, whence intitled to Praise and Dispraise, 282. specific Positions of his Body have reterence to it's cific Extensions, 325. the number of these last, and why, 325, 327. Man has Instincts, but no in	228 438 and eing 253 onal, gent 272. the fpe- fix, mate
Moral, Magnitude, limited by Nature in every Species, where there is an unufual Defect or Excefs, the Bobecomes a Monster, 477, 478. fee Bulk. Mahomet and Omar, Man, Offspring of God, 250. focial, 144. ratio 261. possess of Appetite, and Reason, and the Asof moral Actions, 262. a Compound, and how, 2 whence intitled to Praise and Dispraise, 282. specific Positions of his Body have reference to it's cific Extensions, 325. the number of these last,	228 438 and eing 253 onal, gent 272. the fix, mate Man

has more Faculties, than Brutes; Brutes, more than
Vegetables, — 272, 421, 422 MANUSCRIPT GREEK, Corrections from, 163. quoted
MANUSCRIPT GREEK, Confections from, 103. quoted
in a large extract, — 235
Many and One, — 47, 205
MARCUS ANTONINUS, — — 3, 226
Mathematical Body, how it differs from Natural, and
how it distinguishes in consequence the Mathema-
tician from the Naturalist, ——— 87
MATTER, preparation to prove it's existence, 50, 51,
&c. its character, as opposed to Form, 63, 168. seen
in Privation and Capacity, 65. Matter, Secondary or
Immediate, and Primary or Remote, 67. necessity of
fuch a Being's Existence, 71. two methods of com-
prehending it, 76, 77. inseparable from its Attri-
butes, 473. purely passive, 110, 111, 112, 271.
Dissimilarly similar to the Deity, 11. effential to Ge-
neration, 248. See Matter in the Index to Hermes;
and Form in the Index to Volume the first.
MAXIMUS TYRIUS, — 102, 115
Means, lead not to Ends; but Ends to Means, 121
Measures, both measure and are measured, 22, 311.
Measures of Place, deduced from the human Body,
300, 301. of Time, from the Heavens, - 301
Medea, — 456
Medicine and Cookery, how those Arts resemble each
other, 165
Menage, a Story from him, — 379
Menander and Philemon, 306
Metaphylical, meaning of the Word, 409, 451, 483
Metaphysics, chap. 6. p. 137, 152, 161, 162, 201, 203
to 206 227 228 242 244 245 246 240 260
to 206, 237, 238, 243, 244, 245, 246, 249, 263,
264, 266, 271, 272, 274, 275, 276, 281, 283,
284,

284, &c. to 288, 309, 310, 311, 312, 341, 342,
343, 345, 366, 367, 409, to the end of the chapter,
p. 451, fee the Words, Ethics, Physics, and Motion.
MILTON, his character, a mixed one, of an active and
a speculative kind, 4. quoted, 5, 133, 136, 177,
181, 182, 256, 260, 264, 309, 333, 334, 385,
386, 441.
Mind, the Form of Forms, 113, 114. Region of
Forms, 342, 238. described by Epicharmus, 115.
Mind, fomething divine, 117. feparable, ib. how its
Perception differs from that of Sense, 117. Human,
in its original state, a Rasa Tabula, 120, 415. Mind,
it's amazing powers of Comprehension, 137. how,
in an intellectual way, it partakes of Quantity, 201.
presides over natural Operations, 237. Mind di-
vine, ever in Energy, 266. Mind human, has inten-
fions and remissions, 267. compared to a Library,
454. to a Pilot, — 475
Miscellanies, their character how represented in the
Frontispiece, — 460, 461 Modern Philosophers, 44, 248, 271, 278, 436, 456
Modern Philosophers, 44, 248, 271, 278, 436, 456
Monster, see Magnitude.
Moral Actions, 262. as feen in Nations, in Families,
in Individuals, 268. Moral Praise and Dispraise,
282. Virtue, 419. Happiness, — 428
More, Sir Thomas, 4 Moschus, 337 Moses, 358
Moschus, 337
Moses,
Motion, Physical, or Not-Physical, 381. Phy-
fical divided into fix forts or species, from 383 to 391,
also 482. the first Species, Motion local, 383. the
fecond, Aliation, 384, the third and fourth, Aug-
mentation and Diminution, 385. the fifth and fixth,
Generation and Diffolution, 388, 389. the feveral
Species blend themselves together, 389. Local Mo-
K k 4 tion

tion, effential to all the rest, 390. in what Arrangements they are to be found, 391. Contrariety, 392. REST, ibid. Physical Motion runs thro' the Objects of every Sense, 394. no simple Idea, but complicated with many others, 394, 395, 396. preparation for its Definition, 397 to 400. defined according to the Peripatetics, 401, 403. Pythagorean and Platonic Defininitions agree with that of the Peripatetics, 402. Ariftotle's Definition, tho' hard to comprehend, yet possible, 404. primary Cause of Motion, an intelligent Principle, 437. its rife and duration, MOTION, METAPHYSICAL, what, 407, 408, 409, how united with Physical, 425, 434, 435, 440 Motions, Internal, of the Soul, when tempestuous, when fair and orderly, Motion of Beings, not motive, but moveable, 273. of Beings both motive and moveable, 274, 275. of that Being which is motive, but not moveable, 276. thefe three Species described by Aristotle, Multitude. Music, the antient Modes, 60, 61, 252, 253 Mutation, it's Effentials, what, and how many, 41, 49

N.

Nature, an internal active Power, a Principle of Motion and of Rest, 431, 432, 433. an invisible Cause, known from visible Effects, 434, 435. operates during Sleep, 434. prescribes a Bound or Limit to Growth and Magnitude, in every natural Production, 431. like Art, beholden to Contraries, 46, 47. Nature, what it is, what it is not, 103. Nature or Art, which of the two, prevalent in Homer, and in Shake-speare, 227, 228. Nature does nothing in vain, a savourite

vourite Axiom of Aristotle, 240. Nature, the Energy of God; Art, of Man, 263 Natural Body, what 88 Nηυεμια, fee Calm. Night and Chaos, not the first of things, and why, 287 Non-entity, resembles Relatives, 223. but widely dif-
ferent, ibid. refembles Capacity or Power, 278. but widely different, ibid. and 279, 280, 389. has various characters, — 389, 397, 398, 402 Now, or Inflant, — 183, 184. Number, and Figure, their importance in conflicting
the Sciences of Arithmetic and Geometry, 155
Ο,
Objects, fensible and intelligible, how they differ, 18. Objects, common to more Senses than one, what and how many, 394. of Perception and Volition meet and coincide, 429
Ocellus Lucanus, — 72,75
OMAR and MAHOMET, 253 Opportunity, what, 308. elegant accounts of it from A-
ristotle and Cicero, — ibid. Opposites, — 362
Order, Divine, 311. Order, it's force, 367, 368, 482. order of the Parts in this Treatife, 36, 37, 452
Organ, Logic, an Organ, 22, 27. Hand, an Organ,
113. Body, an Organ, — 275, 425 Organization, see Extension.
Ogun, — 410
Ovid, 80. his peculiar Use of the Word, Form, 100, 101. quoted, 326, 334, 336

P.

Painter, induces Motion upon immoveable canvass, 329.
how far Chance interferes in his Works, 128
Παλαιότερου and Πρεσθύτερου, how distinguished in
their Signification, — 364
PANÆTIUS, — 468
Paffions, different effects from them, as their Motions
are tempestuous, or orderly, — 427, 428
Passivity pure, where it exists, 110. insensitive, 270.
of the Human Mind, how to be moulded, 261. cor-
ruptive and completive, - 269
PAUL, SAINT, 250, 356
IIn, it's fignification, — 389
Peace, to what Genus it belongs - 444
Pedantry, what, - 379
Perception, the Cause of spontaneous Impulse, 423. it's
extensive Influence, 413. coincides with Volition, 429.
different in degree and excellence, 415, 483
Pericles, 2,466
PERIPATETICS, 22, 70. their erroneous System of
Astronomy, ibid. their doctrine about corporeal At-
tributes, 90, 91. about Chance, 128. about Transmi-
gration, 101. about Capacity, 152. about the Neces-
fityof the previous Existence of some Energy, 284,286,480
Perizonius, — — 444
Persius, — — 460
PHILIP of Macedon, his Epistle to Aristotle, 467
PHILO, — — 457
PHILOPONUS, JOHN, 57. explains Privation by the
Musical Modes, 60, 61. his Account of Matter and
Form, 63. explains Democritus, 340. and Motion,
402. quoted, 434, 435. explains the Term, Me-
taphyfical, — 483
Philosophy, why so called, r. its End, ibid. defend-
ed, 3, 4, 5. Philosophy First, see First.

Physics, 33. Chap. 3d. 4th. 5th. p. 136, 153, 164,
173, 199, 200, 231, &c. 248, 258, 260, 270, 271,
273, 278, 322, 323, 328, 329, 339, 340, 341, 381,
383 to 391, 393, 395, 401, 431, 432, 433, 434. See
the words, Ethics and Metaphysics.
Place, defined, 292. its Use in Life and human Affairs,
292. its connection with human affairs generates
WHERE, 295. Placeand Time, QUANTITIES, 183,
187, 291. are capable of being defined, why, 291.
defined, 292.
Plants, or Vegetables, live, but are not Animals, 423
PLATO, his Idea of Matter, 74, 75, 77, 79, 80. quot-
ed, 106, 129. his Account of the liberal Sciences,
197, 198. quoted, 247, 345, 401, 423, 438, 442
Platonic Bodies, — 319
PLETHO, 235. quoted from a MS. ibid.
PLOTINUS, — 148, 205
PLUTARCH, 243, 245. a Correction by one of his
Editors disapproved, 247. Plutarch quoted, 338, 457
Poets, why indebted to the Arrangement of Quality,
176. why to that of Relation, 227. why to that of
Position, 333
POMPEY esteemed Cratippus, and why, 469
Polybius, — 2, 468, 469
Pope, 358
Рокрнуку, — 19, 252
Position, differs from Place, how, 315, 316. de-
duced in its various characters, 317 to 325, also
328, appertains to Bodies, neither perfectly fimilar,
nor perfectly dissimilar, 320. Modes of Position,
first in the Parallelepipedon and Cylinder, 320, 321.
then in the Column or Pillar, 321, 322. then in a
Tree, 322, 323. then in a Man, 323, 324, 325.
Modes of Position increase in number, and why,
from 320 to 325. Positions described, standing, in-
clining

clining, lying, falling, rifing, 320, 321. other Pofitions, 323, &c. Positions relative to animal Progression, 328, 329. Force of those Positions in Painting, 329. in other Works of Art, 329, 330. (See Attitude.) Position gives a Name, and (as it were) an Essence to some works of Art, 330. Its Use to Actors, and Orators, 337, 338. Reason of its amazing Essects, 339. of its Essection and Importance in Nature, and the visible World, 341. transition to its Force in Mind, Intellect, and Beings Incorporeal, 341, 342. in teaching, or communicating Science, 344, 345. its Archetypal Form, where to be found, 346.

Post-Predicaments, 36. their Number, 361

Power, or Capacity, 278. particular Powers, various in character, but limited, 279. differ by this from one another, 280. Powers Active, an important difference in, ibid. Rational Powers differ from irrational, by being double, and by implying both Contraries at once, 281. whence this character arises, 281. Source of Praise and Dispraise, 282. Powers the latent, often valued above apparent Attributes, 282, 283. Power necessarily subsequent to Energy, 286, &c.

PRE-PREDICAMENTS, 36
PREDICAMENTS, 31. Number of them different, according to different Philosophers, 32. pass into one

another, 191.

Principles are contrary, 48. this, the Sentiment of all Philosophers, ibid. are three, and why, 53. Principles, Form, Privation, and a Subject, 56, 57. of these, some agree, others never agree, 55. three Principles reduced to two, Privation being included in Form, 60, 61. Principle Active, and Principle Passive, what, 271. Principles efficient, their Ascent upwards to the First Efficient, 288. Vegetative Principle, 433. Principle of Gravitation, 436. two great Principles of the Universe, what, 453

PRIOR and SUBSEQUENT, their Modes, or Species,
363 to 374. the temporal Mode, 363. the effential,
364. that of Order, 367. that of Honour, 368. that
of Causality, — 372
Prior, the Poet, — 126
Privation, its character, 57, 58, 336, 337, 363, 445
Progression in Arts, 7. in Morals, ————————————————————————————————————
Property of Substance, 134. of Quality, 175. of
Quantity, 191. Properties of all three, 191
Propositions, what, 10, 12, 36. no innate, 413
PROTEUS, his History according to Virgil and Homer;
according to Horace and Ovid, 79, 80. allegorized
by Eustathius, and Heraclides Ponticus, and, in latter
times, by Lord Verulam, - 81, 82, 83
Providence, nothing hid from, 130, 131, 476. con-
fults for the Good of all, 131. extends to the lowest
of Beings, 435
of Beings, — 435 Psalm — 130, 207, 356
PYTHAGORAS, supposed Author of the PREDICA-
MENTS, 7, quoted, 470, 471
PYTHAGOREANS, — 55, 101, 401, 423
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

Q.

QUALITIES corporeal, inseparable from Body, 86. sensible, 88. Quality comes next to Substance, according to the Pythagoreans, 143. Qualities corporeal, and incorporeal, 145, 146. of Capacity and Incapacity, 150. of Habit, 157. natural and acquired, 147. penetrating, and superficial, 164. Figures, Quality, 168, 169. Colours, Quality, 170. Qualities how distinguished from incidental Affections, 171. Persons of Quality, 172, 173. peculiar Property of Quality, 175. Quality and Quantity often introduced together, 21, 207.

Quality, occult, — 435 QUANTITY, Continuous or Discrete, Magnitude or Mul-

titude, 181, 182, 183. Specific Distinctions between the two species, 183, 184, 185. Distinctions of either species resolved ultimately into Identity and Diversity, 190. the Property of all Quantity, what, 191. Quantity passes into Relation, 191. passes thro' all the other Arrangements, 200. sublime Idea of its essential eacy according to Plotinus and Iamblichus, 303, 4. compared to the Predicament, WHERE, — 480 QUINCTILIAN, — 32, 207, 306, 438, 456 Quantitions, Apology for their number, 455. justified by examples, — 456, 457

R.

Raleigh, Sir Walter, — 4
Rafa Tabula, the Human Mind or Intellect fo called, and
why, — 120, 415
Rational, and Irrational, Faculties, — 418, 419
Reafon, 262, 419. its object, ibid. fometimes overwhelmed by the Passions, fometimes obeyed by them,
427, 428

RELATIVES, other Arrangements or Predicaments pass into them, 191. commutable in their character, 192, 3. why exprest by a plural, 212. their force and efficacy, 214. true and genuine Relatives, what, 215, 217. their Properties are, to reciprocate, 218. to be understood both of them at once, and with equal precision, 219. both of them to co-exist, and cease at the same instant, 221. other Predicaments connected with Relation, 191, 192, 213, 216, 217. Relation appears trivial, yet in fact is of the last importance, 224, 225. the Basis of Moral Duties, 225, 226, &c. supplies Connection, where Continuity fails, 230. Relations traced thro' the Universe, 230. those of the Sun to the World, 232. of the Earth to Vegetables, 232, 233. of Animals, Families, Civil Polities.

Polities, to each other, 234. of Vegetables 235. Relations amicable, 236. hostile, 239, 240. hostile Relation gave rise to the Phoenomenon of Evil, 241, &c. chief and supreme Relation, that of the whole to God, 249, 250. Utility of this Arrangement, 250. Things intelligible, and Intellection; things sensible, and Sensation; how these become Relatives, 251.

Rest, the natural Opposite, or Contrary to Motion, 392. its several Species from page 441, to 444. Cessation of Local Motion, 442. of Growth, ibid. of the Vital Energies, ibid. of bodily Labour, 443. of Study, Investigation, and Deliberation, 443. of War,

S.

SANCTIUS, 443 SANDERSON, 36, 220, 221, 292, 316, 348 SANDYS. 458 SAPPHO. 151 SATURA, or SATIRA, when applied to Writings, did not mean at first either Sarcasm or Calumny, 460 SATYRUS, the Actor, 338 SCALIGER. Science, is of Contraries, 281. Sciences and Arts, their Subordination, and common dependance on the First Philosophy, 366, 367. Science prior to Art, 482. its Etymology in Greek, 444. no Science of particulars, 20, 21. Sciences and Arts, traced up to, and deduced from, the several Arrangements or Categories, by examples taken from each of them, 461, 462 Scripture,

Scripture, 43, 56, 114, 130, 207, 250, 305, 306, 337,
356, 358, 431, 446
SENECA, 410, 412, 413, 420, 457
Sensation, not taught, but perfect from the beginning, 153.
a Species of Knowlege, — 483
Sense, Common, what, — 202
Sensible Objects, differ from Relatives, how, 220.
sensible Objects, Common to many or all of the
Senses, what, and how many, —— 394
SHAFTESBURY, Lord, quoted, 103
SHAKESPEARE, 69, 147, 170, 174, 227, 228, 256,
293
Sibyl, Cumean, — — — 135
Sicily, — — — 325
SIDNEY, ALGERNON, - 4
Silva, a Wood or Grove, meant a miscellany Treatise,
why, 46r
SIMPLICIUS, his account of the Predicaments, 32.
wrote a valuable Tract upon the Subject, 7. quoted,
50, 59, 112, 143, 148, 166, 205, 213, 214, 215,
223, 224, 250. his account of the Enharmonic
System, and of the Stoic Writings, in the age when
he lived, 232. quoted, 253, 261, 262, 264, 265,
272, 294, 295, 298, 317, 349, 350, 364. 374,
SITUATION. fee Position.
Sleep and Death, Brothers, 337, 443. Sleep, what
443
Social Sympathy, 144. State, 416.
Socrates, — — 119, 197, 447, 448
Sophocles, — — — 338
Soul, its three great Principles, 106. itself not visible,
but known from its Operations, 108. immortal, 118
Space, of Place and Time, connected with Motion,
how, — — — 395
Sphere,

Sphere, has no Position, or Situation, tho' it occupy
Place, 318, 327
Spontaneous, how it differs from Forced, 408. what
it is, and what constitutes it, 410, 411, 412, &c.
Stat and Sedet, peculiar uses of them, 443, 444
Stat and Sedet, peculiar uses of them, 443, 444 STATIUS, 461
Stoics, 22, 72, 411. account of the State of their
Writings in the time of Simplicius, — 253
Strife, its utility, — 245, 246
STUART, 461
Sublunary, meaning of the Word,70
SUBSTANCE and ATTRIBUTE, 25, 454. general
and particular, 25. at the head of the Predicaments,
31. Substance natural, how continued, or carried on,
38. Substance, its Properties, considered logically,
132. has no Contraries within itself, 133. but
fusceptible of them all, Substantial Form, what, SUIDAS, 134 90, 164, 167, 387 SUIDAS, 129
Substantial Form, what, - 90, 164, 167, 387
Suidas, — 129
Sun, his Relations, and Duties, 232. a Cause of
Generation, 246. prefides over his proper System,
341
SUPREME BEING, 102, 110, 139, 161, 249, 264,
287, 288, 311, 313, 345, 450
Συςοιχία, 55, vide Co-arrangement.
SYDENHAM, his elegant translation of Plato, 345,
4.10
Syllogisms, — 10, 11, 12, 13, 429
Sylva, Matter, 74, 247. Sylvæ, Miscellanies, 461
Systems of Nature, four: one, which admitted no God,
128. a fecond, which supposed Gods, that gave
themselves no trouble, 129. a third, which only em-
ployed them on difficult occasions, 130. a fourth,
L 1 which

which supposed Divine Providence never to cease	for a
moment,	130
Т.	
TACITUS,	373
Taste, what it is, 459, 460. its natural Union,	450
TEMPLE, Sir W.	4
Terms, fimple, their importance, 12, 13. what	
represent, 14, 15. their character, 17. such ar	nong
them as denote When, and Where, 299, 300. fu	ch as
denote them not, yet denote Time and Place,	300
	209
THALES, his Idea concerning the Magnet, 435.	fine
Sentiment about Providence, ibid. and p.	476
THEMISTIUS, 59. his Idea of Matter, 66, 71	, 138
Theognis,	57
Thrasea Pætus, — 3	373
Tibullus, —	209
TIMÆUS, — 75, 79, 80,	
Time, Place, both of them Quantities, 183, 290.	
how distinguished from other Quantities continuished, 7. Distinction, a peculiar one belonging	
Time and Place, 187, 8. Time infinitely div	
in Power, but not in AET, 188. having a Go	mile
and a Difference, may be defined, 291, 292.	ite
Use in Life, and human affairs, 293 its cor	nec-
tion with human affairs generates WHEN,	202
	297
Tous deux,	472
Trogedy and Comedy made out of the same Letters,	343
Transition, see Motion.	
Truib, all Truth, Good, 430. its union with	
in fine Writing, 459. all Truth, fimilar and co	nge-
	nial

INDEX.

nial, 1, 459. consequence of this, in the forming of characters, 1. in the elegance of Composition, TYPHOEUS, the Giant, his Politions finely enumerated by Ovid, when he describes how the Island Sicily was thrown upon him, 325, 326 V. VANBRUGH, Sir John, his elegant reply, and his predicting the fine tafte of gardening, now at its height in Great Britain, 353 Vappa, fee Fopp. VARRO, 470. his account of four Predicaments, ibid. Vegetative Life, described, 434, see Nature. VELLEIUS PATERCULUS. VENUS wedded to VULCAN: the Fable explained, 7. her Motion, as a Goddess, 201. her Appearance, Utility of these Arrangements or Predicaments, 17, 33, 34, 453, 454, 458, 460, 462 Verbs transitive, and Neuter, where to be found among the Predicaments, 266 VERULAM, Lord, 82 VIRGIL, 90, 106, 109, 110, 129, 135, 147, 177, 181, 182, 200, 210, 233, 234, 241, 242, 257, 270, 280, 295, 296, 297, 305, 307, 308, 333, 337, 357, 373, 375, 383, 386, 427, 433, 437, 443, 445, 447. VIRTUE, PLEASURE, and HERCULES, 262. moral 160 Virtue. Unifying comprehension, the Property of Mind, 137, 138, 47, 245, 251 Union. L12 Volition

INDEX.

Volition and Perception, their objects coincide, where,
429
VOLUME THE FIRST, 128, 140, 169, 201, 230, 234,
248, 270, 282, 283, 329, 409, 424, 432, 433, 445
Υποκείμενου and υλη, how they differ, — 71
UPTON,
W.
VV •
WALLIS, — 292, 316, 348
Wants, their Efficacy, 230, 231, 248, 249. Source of
Connection, 411. founded on Perception, 424.
the Source of animal Motion, 426. lead to Arts,
and Industry, 445. to have few Wants, is great;
to have none, Divine, 447, 448
WHEN connected with Time, 292. its nature and
character, 297. co-incides with WHERE, 297.
an enlarged When, and a precise one, both of
them relative to each individual, 302. use of the
precise When, in computation of distant Time, 303 WHERE, connected with Place, 292 its nature and
character, 297. co-incides with WHEN, 297.
Where and When called by Simplicius Brothers,
298. an enlarged Where, and a precise one, both of
them relative to each Individual, 302. use of the
precise Where, in computing distant Places, 303,
compared with Quantity, 480
WILTON-House, its valuable Marbles, - 332
Wifdom, Book of, — — — 430
Words, Things, Ideas, all respect simple Terms, and
how, — — — 15, 16
World, one City or Commonwealth, 230, 231. a
Theatre, 244. made by Reason, and Design, 309,
310

INDEX.

X.

XENOPHON, the Speech he gives to CYRUS, when dying, 108, 118. his account of the Earth's Justice, 233. of Virtue, Pleasure, and Hercules, 262. quoted, 446, 447, 448

Z.

Znv, Zwa. the first applied to Plants, or Vegetables, the latter, not applied, and why, 423.

FINIS.

ERRATA.

P. 21, after the Greek quotation, and before the words, editable. Sylb. infert 12.

P. 31, 1. 16, for CATEGORICS read CATEGORIES.

P. 36, in the note, for Anti-pradicamenta read Ante-prad. P. 327, l. 7, for Parallelipipedon, read Parallelepipedon.

In the Index, under the article, Attitudes, for Dependence read Despondence.

- under the article, Motion, after the word, Aristotle, instead

of p. 147 read 247.

under the article, Power, after the words, or capacity, infert





















